CANNER PACKER

September 25, 1960

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a consolidation of:

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WESTERN CANNER and PACKER

YEARBOOK NUMBER

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canned fruits are naturally
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corn syrup

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CANNER PACKER

volume 129, number 10 YEARBOOK NUMBER

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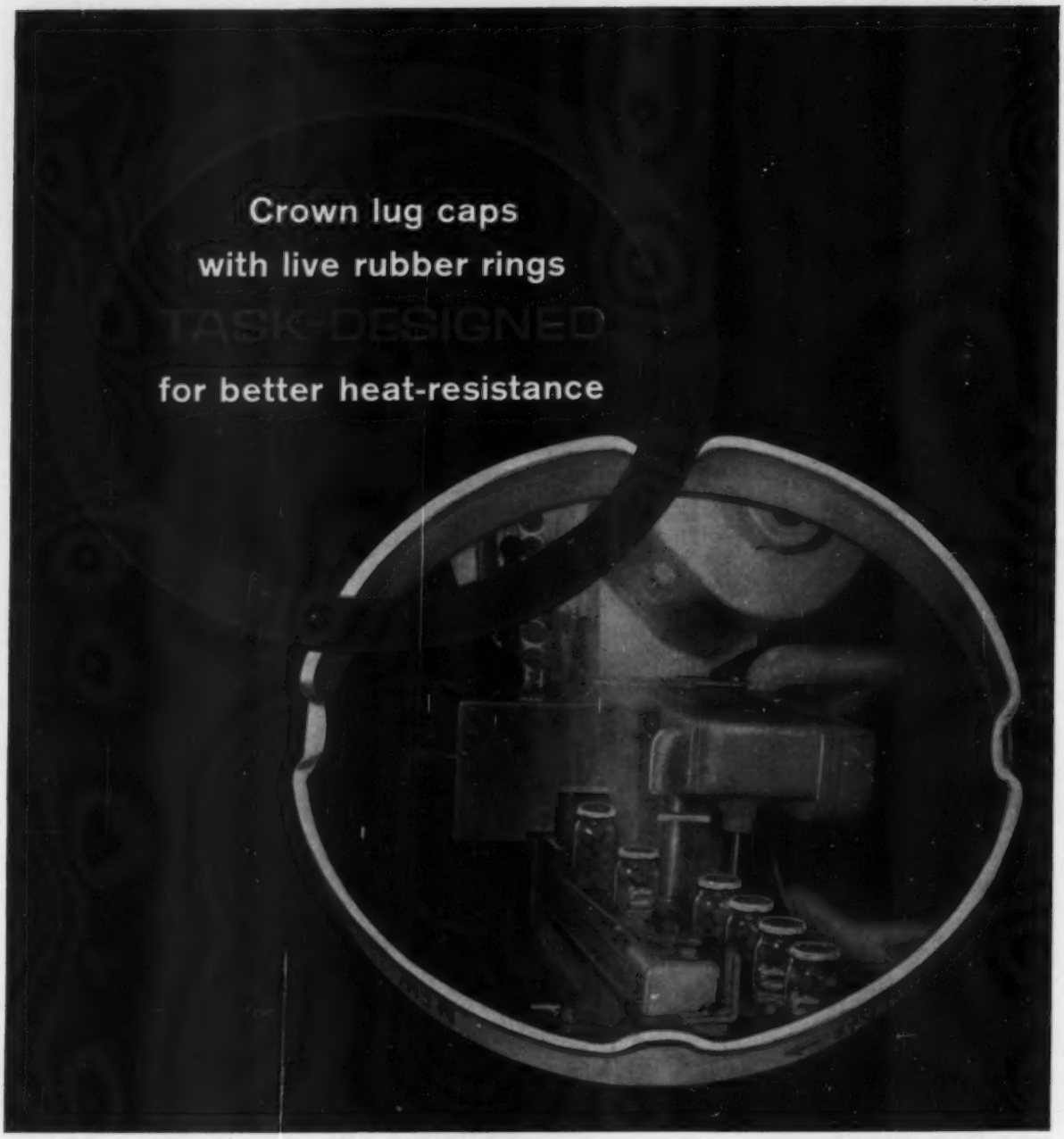

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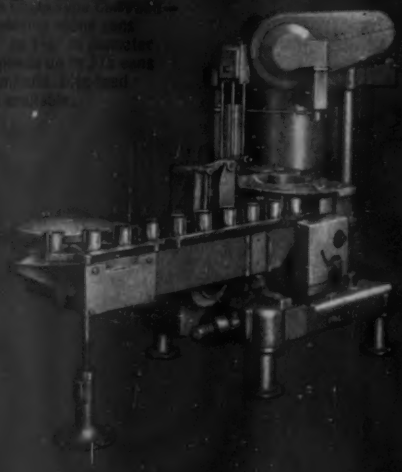

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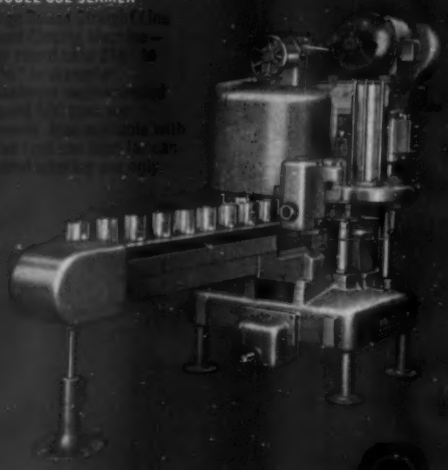

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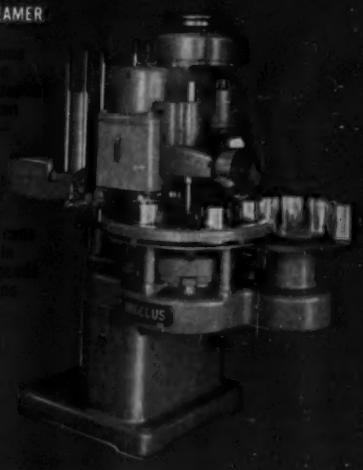

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- ☐ Breaded Shrimp
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- ☐ Barbecue Short Ribs
- ☐ Beef (sliced) in Barbecue Sauce
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- ☐ Breaded Beef Steaks
- ☐ Breaded Pork Chops
- ☐ Breaded Veal Steaks
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- ☐ Wieners

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- ☐ Chicken Pot Pie
- ☐ Turkey Pot Pie
- ☐ Turkey Sticks

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- ☐ Breaded Shrimp
- ☐ Fish Sticks
- ☐ Shrimp Cocktail in Sauce

PIES (DESSERTS)

- ☐ Apple
- ☐ Cream
- ☐ Mince
- ☐ Pumpkin

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- ☐ Cookies
- ☐ Coffee Cakes
- ☐ Pies
- ☐ Doughnut Sugar

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- ☐ Barbecue Sauces
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- ☐ Chow Mein
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Griffith, manufacturer of laboratory-controlled

SPICES AND SEASONINGS (Purified GROUND, or SOLUBLIZED), BATTERS AND BREADINGS, BINDERS, MEAT SAUCES, MEAT CURES, MEAT TENDERIZERS, ONION AND GARLIC POWDERS, FLAVORING EMULSIONS, MONO SODIUM GLUTAMATE AND HYDROLYZED VEGETABLE PROTEINS, BACTERICIDES AND CLEANSERS.

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- **BETTER COLOR**
- **SMOOTHER TASTE**
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THOUSANDS OF NEW PRODUCTS!

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ANCHOR HOCKING

Get set for the exciting 60's with Anchorglass Packaging—put an Anchor Man on your team

This is a Knife

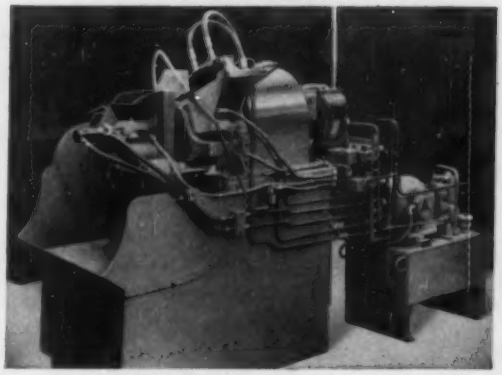
. . . it was *designed* by Urschel
. . . it was *engineered* by Urschel
. . . it was *manufactured* by Urschel
for an *Urschel machine*

It is the most important part of the machine because it cuts the product. The thickness of this knife is controlled to less than one ten-thousandth of an inch. Knives of such accuracy have *never* been made by others. This accuracy makes it possible to stack many knives on a knife spindle with such precision that knives can be replaced without adjustment and without having the knife rub against mating parts. This accuracy helps to reduce maintenance to a minimum.
Induction heating is used to harden only the edge of the knife to a greater hardness than would be practical to harden the entire knife. The hard edge causes the knife to stay sharp for an extended period. Soft material backs up the hard edge so that the knife will bend rather than break into fragments if the knife strikes a foreign object.
The selection of stainless steel in this knife and its treatment is based upon many years of metallurgical experience in the testing of stainless steels for the cutting of food products.

Closeup of specially treated Urschel knife edge

This is a Machine

. . . it was *designed* by Urschel
. . . it was *engineered* by Urschel
. . . it was *manufactured* by Urschel
for the *making of Urschel knives*



This is only one of many machines made in the Urschel shops for the manufacturing of knives. Standard machine tools cannot be purchased for the economical making of Urschel knives for the required rigid specifications. Research is continuously carried on at Urschel Laboratories in search of better methods and better materials for the manufacture of knives.

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LABORATORIES INC.
VALPARAISO, INDIANA

Designers and manufacturers of precision, high speed cutting equipment for food products.

Want more profit from your Canning Operations?

. . . without replacing present equipment, or building a new plant, or even hiring more people!

• Check your adhesive. That's where some profit opportunity lies. Because the adhesive is one of the controls that govern your rate of production. And production is profit. Obviously, the more production your present setup will give, the more profit you will earn.

Therefore, speed and strength of tack of your adhesive are vital. Your adhesive must do much more than just "adhere".

Swift's high speed resin Lap End Pastes are made for optimum efficiency at production-peak levels. And what's more, they give a rust inhibited lap as well! Swift's 23 adhesives plants produce a complete line of canning adhesives for the most specific applications—prompt, courteous, *and* authoritative service throughout the United States and Canada.

Be sure your Pick-up, Lap End and case sealing adhesives *are* helping your profit. Call your Swift Adhesive Specialist for all your adhesives. Or write for additional details to Swift & Company, Adhesive Products Department, Chicago 9, Illinois.

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RESINS AND RUBBERS IN EMULSION OR SOLVENT
DRY, LIQUID AND FLEXIBLE ANIMAL GLUES •
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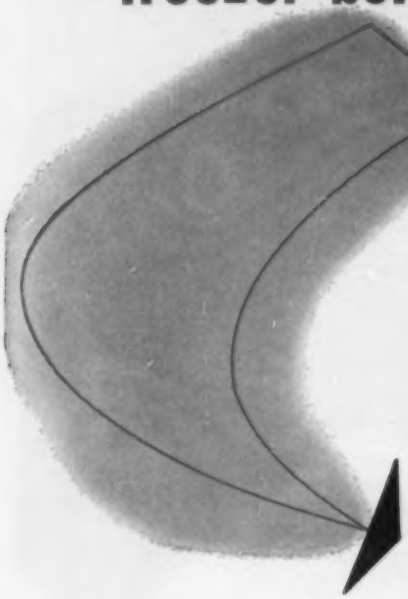
105TH YEAR

for fast, even feeding of freezer belts



Simplicity 18" x 11'-0" KA Stainless Steel Feeder Feeds 8,000 lbs. of Corn or Peas Per Hour—Entire Width of Freezing Belt

A problem familiar to all frozen food manufacturers is even distribution of product over the entire width of the freezing belt. This problem is solved with a SIMPLICITY Stainless Steel Feeder.

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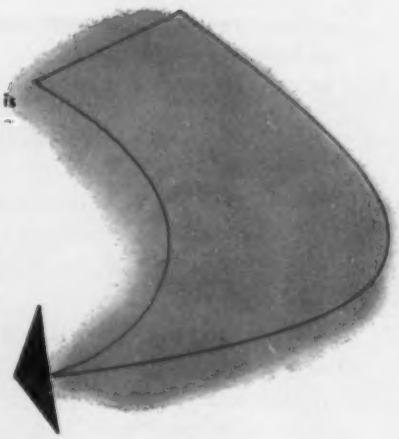

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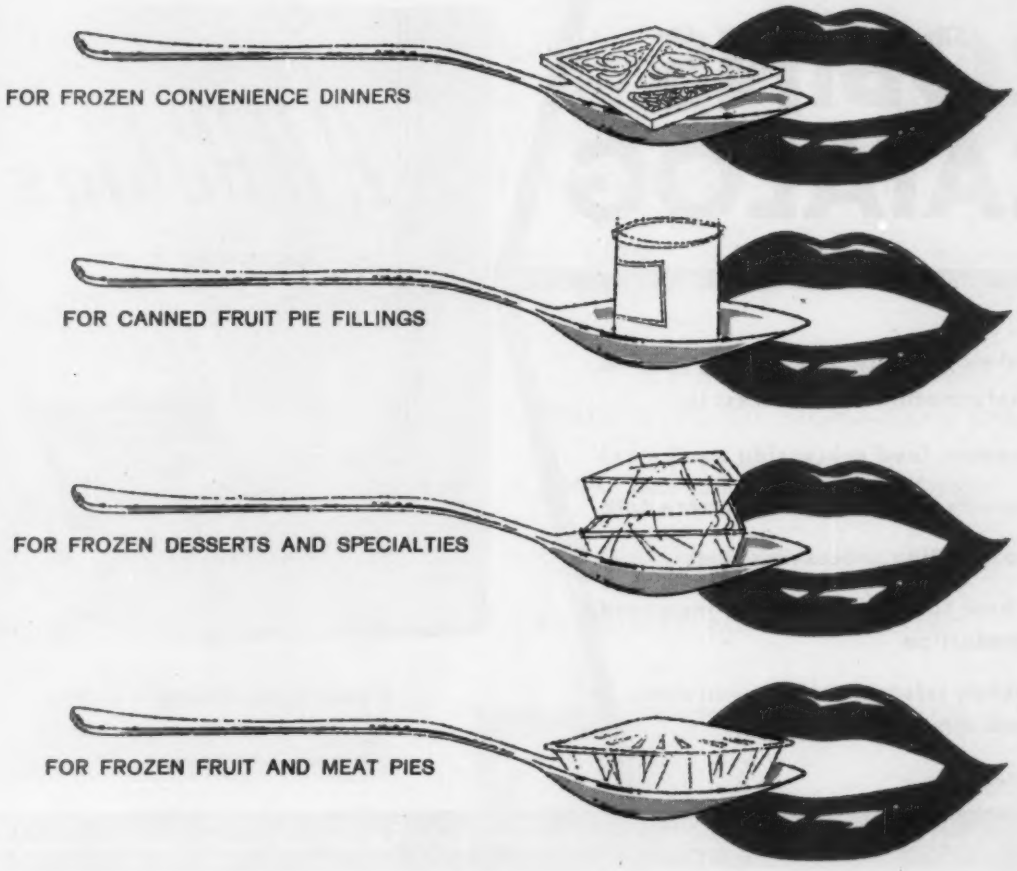
FOR FROZEN CONVENIENCE DINNERS
FOR CANNED FRUIT PIE FILLINGS
FOR FROZEN DESSERTS AND SPECIALTIES
FOR FROZEN FRUIT AND MEAT PIES

NEW STANDARD IN STABILIZERS

COL-FLO 67—canned or frozen—never imparts an undertone of cereal taste. Never interferes with natural food flavors.

UNMATCHED STABILITY. Col-Flo 67 safeguards and improves stability. All tests show far greater resistance to freeze-thaw breakdown than wheat flour or other waxy starches.

EXCELLENT CLARITY. Col-Flo 67 doesn't cloud natural colors between processing and eating. An appealing crystal clear glossiness highlights your food product.

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YOUR ROBINS CATALOG

. . . always ready and waiting to give you information on the latest in

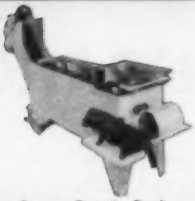
- √ modern food processing equipment
- √ specifications and performance data
- √ cost-cutting processing hints
- √ "how to do it" ideas for increased production
- √ handy reference tables, can sizes, box dimensions, etc.

If your Robins Catalog is getting worn out—write us for a fresh, new copy.

Here are just a few of the special processing machines designed and developed by Robins to meet unusual or specific processing needs.

Roll-over Tomato Grader—for fast, positive grading without product damage

Thermatic Blancher reduces shrinkage—promotes retention of flavor



Roto Screw Caustic Peeler saves time and reduces peeling losses on root vegetables

Batter-Dipper insures complete uniformity and 100% coverage

A.K.Robins AND COMPANY, INC.

Manufacturers of Food Processing Equipment Since 1855

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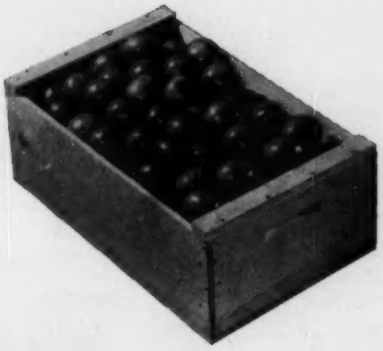
Machinery for processing: Apples and Apple Products • Asparagus • Beets • Corn • Dried Beans • Lima Beans • Marmalades • Olives • Onions • Peaches • Peas • Peppers • Pickles • Potatoes (White and Sweet) • Pumpkin • Relishes • Sauerkraut • Shrimp • Spinach • Strawberries • String Beans • Tomatoes . . . plus many operating and maintenance supplies of all kinds, including rubber goods.

NAILED WOODEN PICKING BOXES

FOR FAST ECONOMICAL HARVEST HANDLING



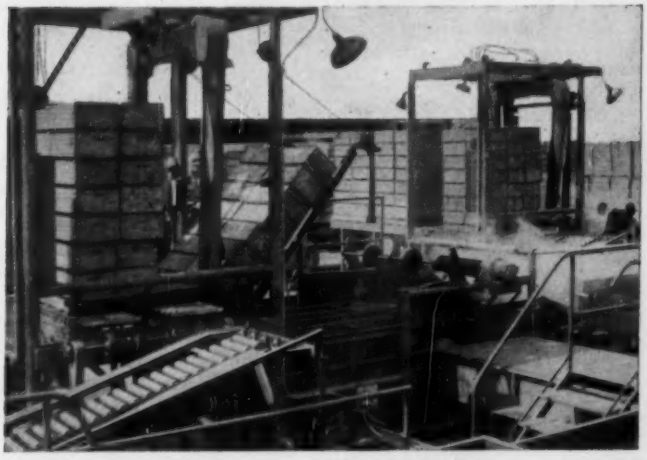
Mid-West Style
capacity 36 lbs.

DUMPING RATE:
1 TON PER MINUTE

Western Style
capacity 50 lbs.

PALLET HANDLING

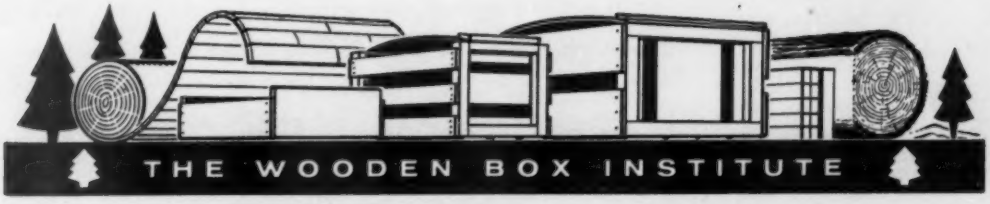
- **STACK 7 TO 10 HIGH—SAVE SPACE**
- **FORK TRUCKS SAVE MANPOWER**
- **ONE PALLET LOAD = ONE TON**
- **ELIMINATES ROUGH HANDLING**



DUMPING

- **A PALLET LOAD A MINUTE**
- **BOXES WASHED AUTOMATICALLY**
- **AVERAGE LIFE OF BOX 10 YEARS**

(For small plants, chain type dumpers permit in-line automatic operation)



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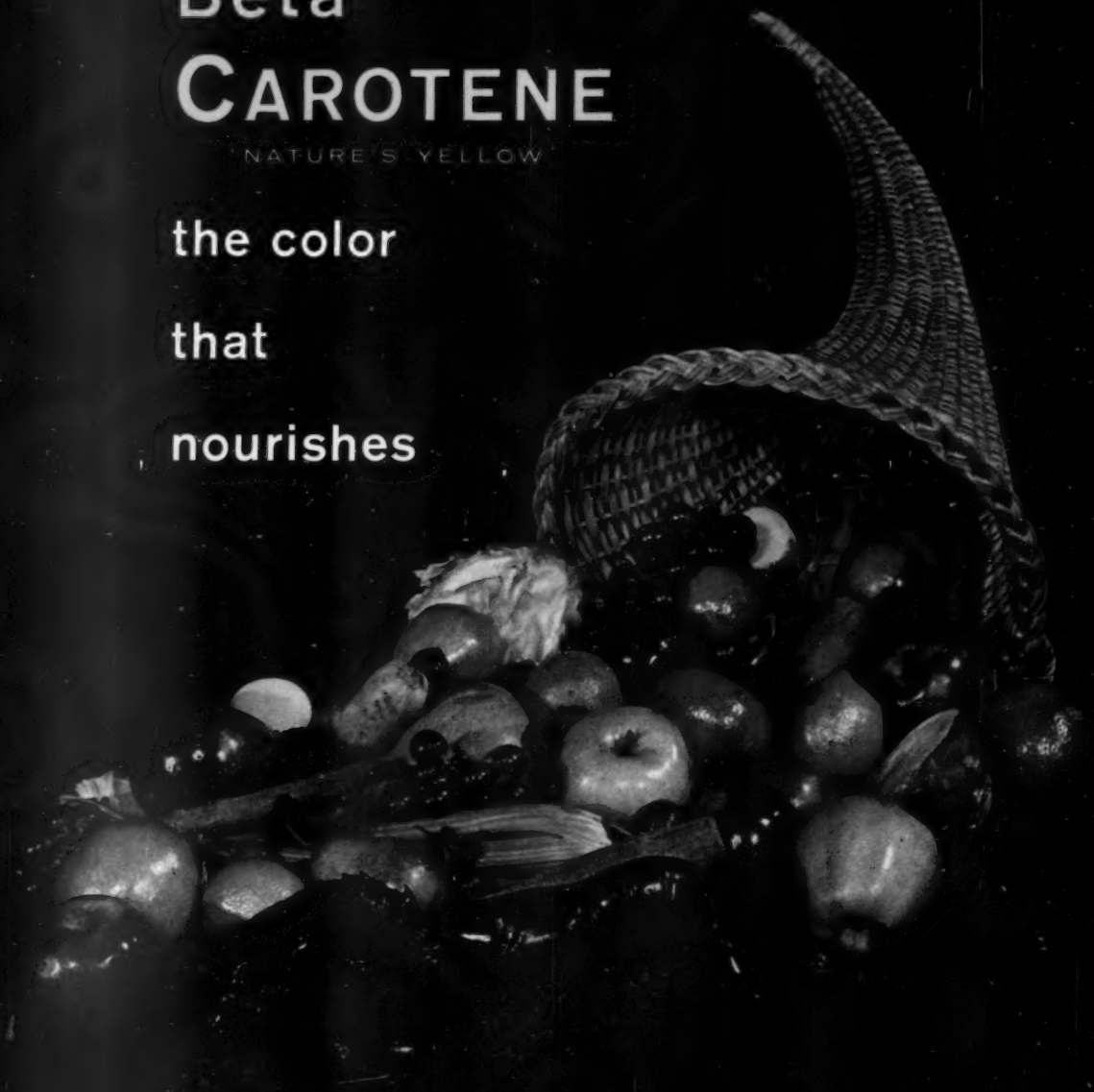
KEEP FAITH WITH NATURE — GUARD HER GOODNESS

Beta CAROTENE

NATURE'S YELLOW

the color
that
nourishes



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FINE CHEMICALS DIVISION **HOFFMANN-LA ROCHE INC.**, NUTLEY 10, NEW JERSEY

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BETA CAROTENE ROCHE®

'Nature's Yellow'—The Color That Nourishes

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appealing YELLOW

safe YELLOW

uniform YELLOW

TRUE NATURAL YELLOW COLOR—No tinge of green or red. True yellow from Beta CAROTENE Roche means consumer satisfaction, repeat sales.

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NATURE'S OWN COLORING—Beta Carotene is a natural component of foods, in contrast with most other materials which have been used for coloring.

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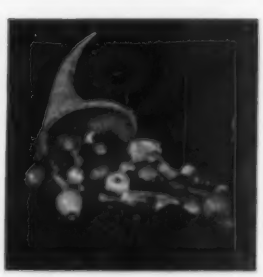
Fortify and color your margarine in one operation. Roche blends pure Vitamin A and Beta CAROTENE in vegetable oil, makes delivery to you in sanitary metal cans. Ideal for batch mixing.



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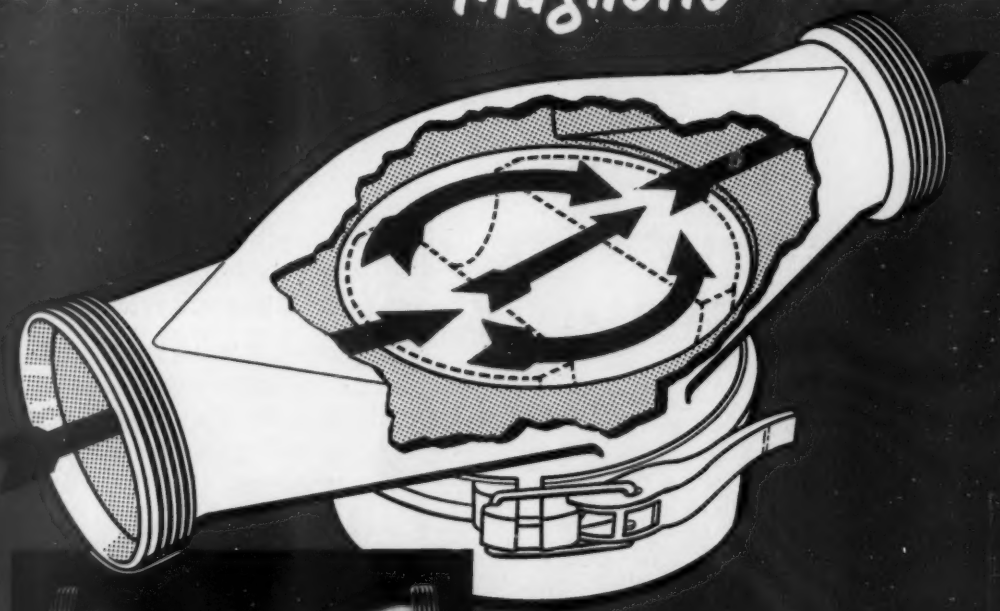
Eliminate the hazard of stray metal in your liquid conveying lines with TRI-CLOVER *Magnetic* TRAPS



■ Arrows indicate how fluid flows in a widening stream over the intensive magnetic field created in the Tri-Clover full-flow trap. Tramp metal is trapped in an extra-wide, recessed area, and is easily removed by simply releasing the ring clamp.

Here is the best way to eliminate the hazard of stray metal in your liquid conveying lines . . . tramp metal that can cause product contamination and damage costly processing equipment. With Tri-Clover Division's full-flow Magnetic Trap, positive protection is assured. Simple, streamlined design permits easy removal of all trapped foreign matter through instant disassembly of the trap body and magnet housing unit.

These Tri-Clover Magnetic Traps employ an extremely powerful non-electric Alnico one-piece permanent magnet to assure maximum removal of tramp metal. They are available in both Sanitary (polished finish, with Acme Threads) and Industrial (pickled finish, I.P.S. threaded or flanged) construction in 2″, 3″ and 4″ sizes. Both types are fabricated from wrought sheet type 316 stainless steel, and offer maximum corrosion-resistance, streamlined flow, with minimum product agitation and friction.

Write for further information, or see your nearest TRI-CLOVER DISTRIBUTOR.

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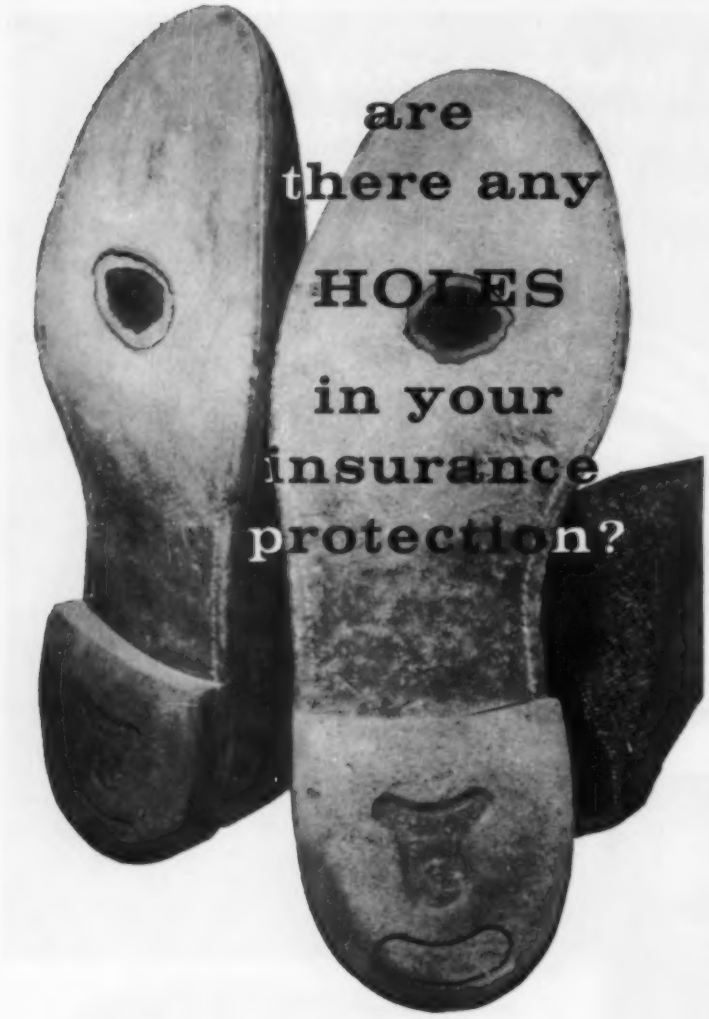
Cable TRICLO, CHICAGO, U.S.A.

TRI-CLOVER

LADISH CO.
Tri-Clover Division
Kenosha Wisconsin



Your insurance protection can also develop some mighty big holes, if not checked carefully at least once a year.

Today's increasing valuation basis, alone, can leave you badly underinsured if you are not being advised properly on the best manner of maintaining insurance up to present day valuation levels.

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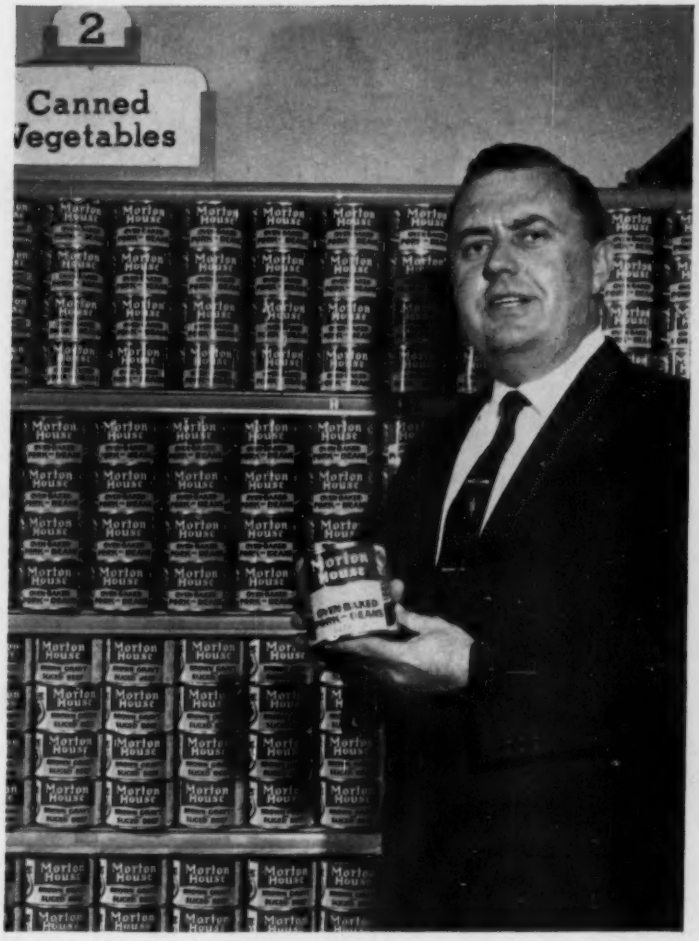
"Cromwell Ferro-Pak* Treated Can Bags Inhibit Rust BEFORE IT STARTS"

"We have used Cromwell's Ferro-Pak treated can bags for over a year," says J. D. Mullen, Vice President in charge of Operations of the Otoe Food Products Company, "and sincerely believe that it helps to keep our Morton House Brand cans rust-free and shiny.

"Cans in our plant are protected in Ferro-Pak treated bags, so that rust doesn't get a chance to start. The cans arrive at the stores completely rust-free, without the almost invisible rust specks which would continue to grow and mar the can's attractiveness."

*Ferro-Pak inhibitor is a volatile gas. Emanating from Cromwell bags, it prevents corrosion—inhibits rust before it starts.



Cromwell Ferro-Pak treated can bags can reduce your rust problems.

Fill in coupon

and return it to the Cromwell Paper Company for full information.

if you are a manufacturer or user of cans, Cromwell's Complete Packaging Service can help you protect your products, too.

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Manufacturers of: Papers (Impregnated · Coated · Laminated · Reinforced · Flexible) · Bags Sacks · Liners · Covers · (Single and Multiwall construction, using all types of material to carry, cover or protect all types of products).

Please send information on **FERRO-PAK** for inhibiting rust on tin cans.

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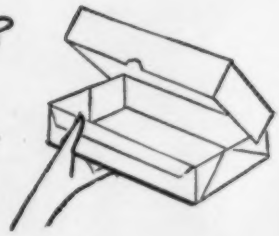
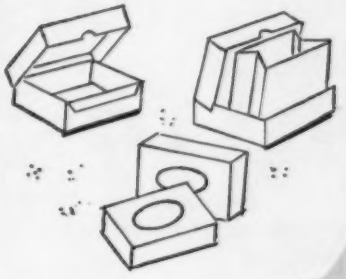
"REMEMBER 1945?

Our linerless 1-piece No. 5 STYLE carton revolutionized the filling of consumer-size packages for frozen foods —at speeds of 80-100 per minute."



"TRIPLE THREAT IN '45

Marathon was the one source you could call on for printed or plain cartons, high wet-strength bags, laminated overwraps."



"AND IN 1951

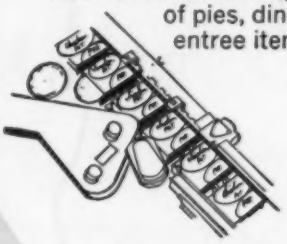
our new, end-opening MARAPAK cartons on new MARAPAK machines made it simple to fill up to 300 packages per minute —twice as many as ever before."

"FOR OUR 1955 FIRST

we introduced a new supergloss overwrap called GLAMAKOTE®— unequaled for both machinability and appearance."

"WHEN '56 ROLLED AROUND

we came out with the MARAPAK H high-speed cartoning machine for fast horizontal loading of pies, dinners, entree items."



"THEN IN 1958

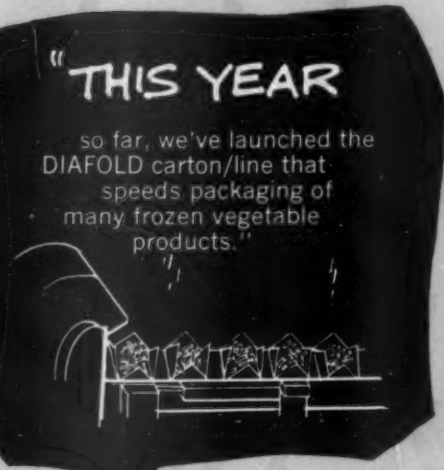
the finest cartons ever printed took the market by storm. Marathon's miraculous HI-FI GLAMAKOTE cartons have to be seen to be believed."

"AND THEN IN THE FALL OF '49

came TYTON—the better-sealing, more protective, specially waxed overwrap."

"THIS YEAR

so far, we've launched the DIAFOLD carton/line that speeds packaging of many frozen vegetable products."



"but what have you done for me lately?"

THAT'S A GOOD QUESTION

And a fair one. Though we're proud of past contributions to the frozen food industry, we readily admit that it *is* the past.

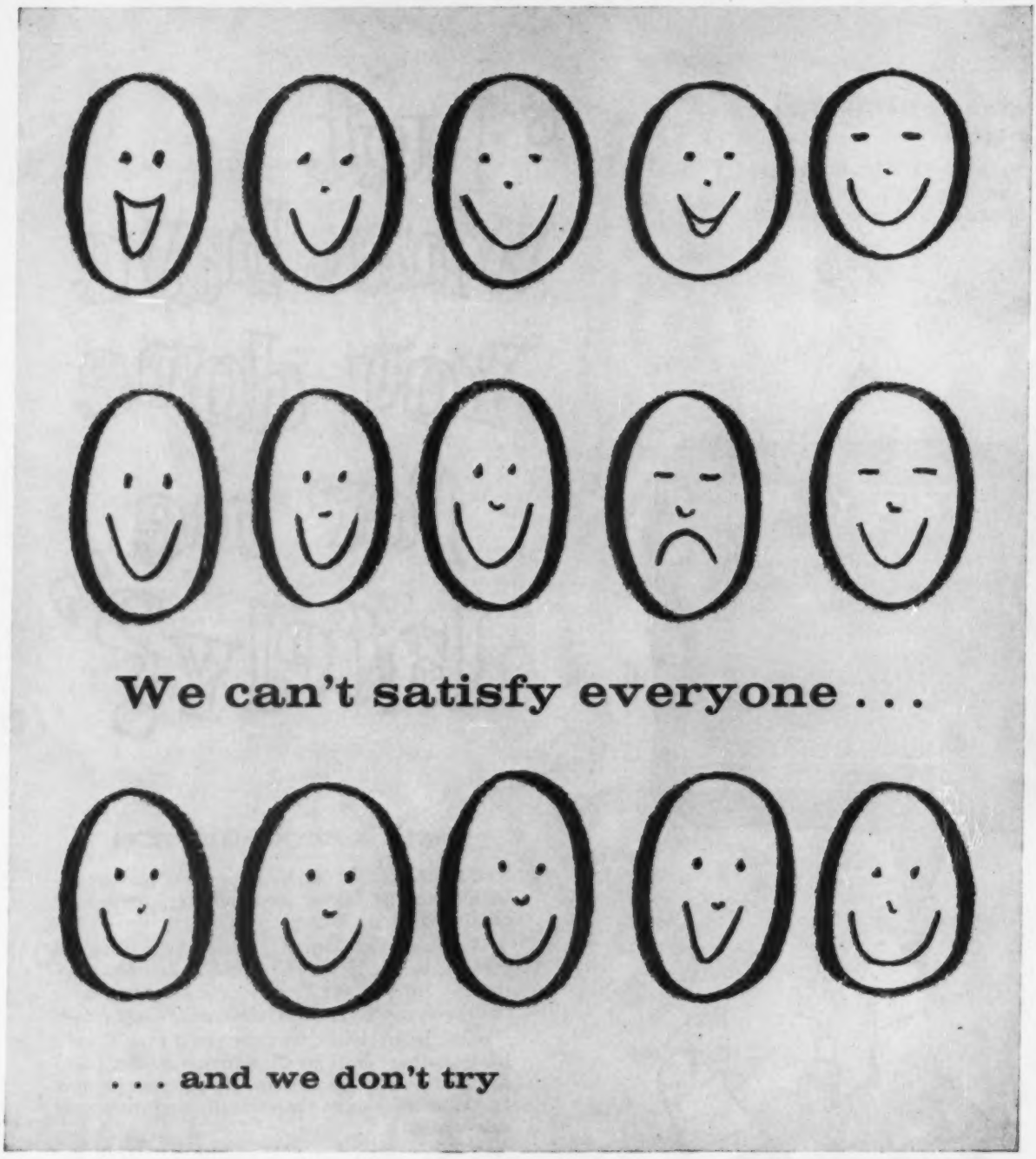
What's coming from Marathon? We're going full speed ahead in Research . . . in Product Development . . . in Package Engineering. That can have but one result, as past performances clearly prove.

Soon, probably sooner than you'd expect, we'll have another "first" by Marathon—another package or packaging machine to help put your product on the market more economically *and* with more *sales* appeal.

Ask your Man from Marathon to keep you posted. Marathon, A Division of American Can Company, Menasha, Wisconsin. In Canada: Marathon Packages Limited, Toronto 3.

For packaging... and ideas..

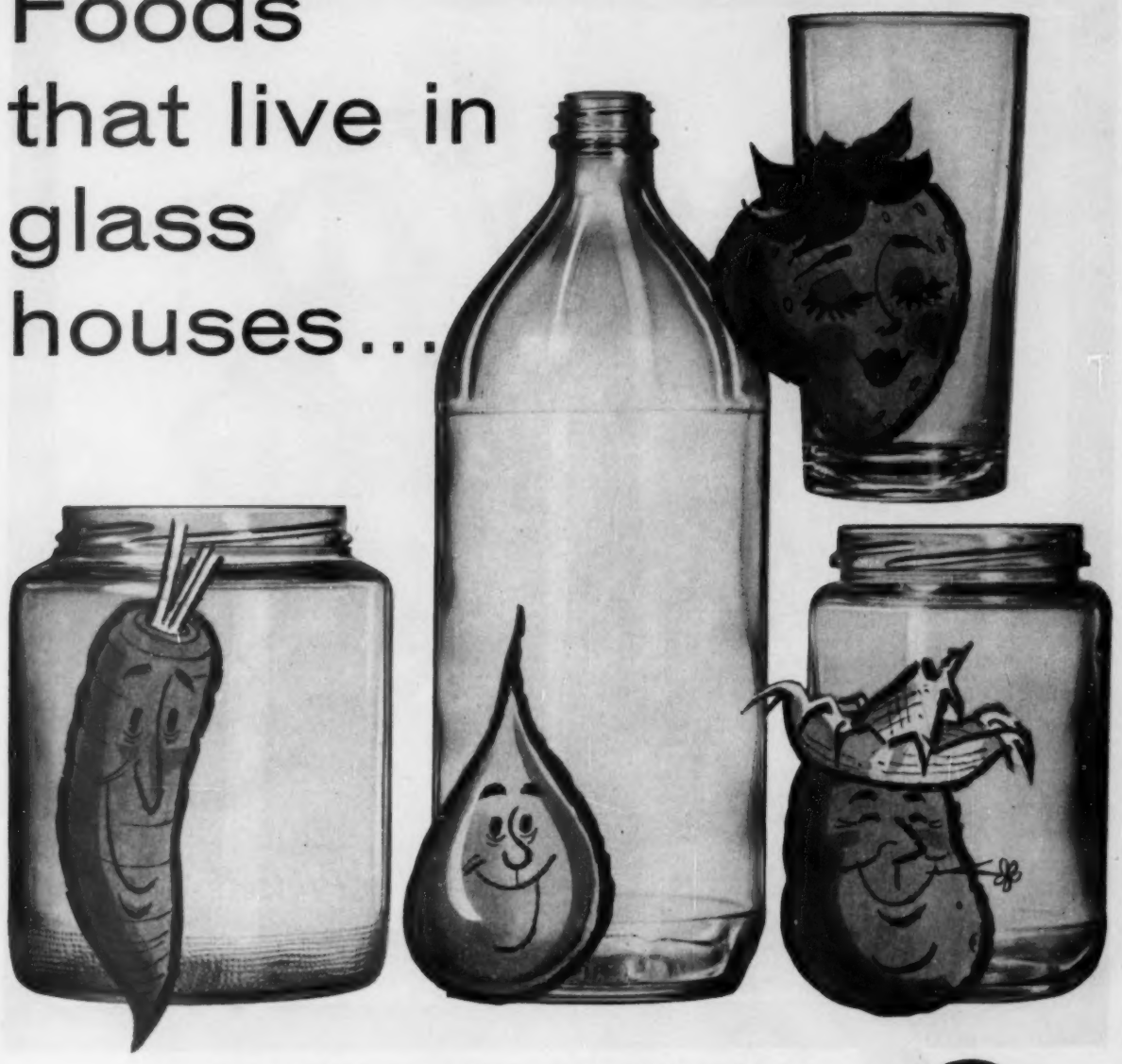
you can't beat marathon



To be all things to all people is admittedly impossible. That is why at UNION we have chosen to concentrate all our skill and resources solely in the creation of the finest *corn* products—starch, corn syrups, and caramel coloring—and to satisfy only those people who can fully appreciate the value of our achievements.

UNION STARCH & REFINING COMPANY, INC.
Columbus, Indiana

Foods that live in glass houses...



...are more at home in H-A

...glamour in glass!

Besides the contented edibles pictured above, H-A glass is home to a whole *range* of other fine foods. Packers really appreciate the crystal-clarity they get in H-A glass. They know their foods always look extra-inviting behind that sparkling wall, tempting every customer who comes past. And customers can't resist the mouth-watering appeal of wonderful foods in shining glass. Plan to give *your* foods the advantages of exciting, best-selling glass packages by H-A. For information, just write:

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DIVISION OF
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Wheeling, West Virginia

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Diamond Crystal Flake-type Salt . . . produced by the exclusive Alberger process . . . guarantees unmatched cleanliness, uniformity and purity.

Diamond Crystal Flake Salt contains less than 20 parts per million of insolubles. Filter pad tests consistently indicate that it has the lowest content of insoluble matter or foreign material of *any canning salt*. The extremely low content of injurious compounds (calcium, magnesium, copper and iron) provide the required purity to insure quality and grade of pack. Diamond Crystal Flake Salt, because of its high purity, enhances the natural flavor and tenderness of your product. It avoids reaction with oxalate and formation of white precipitate. The low content of copper and iron in Diamond Crystal Flake Salt assures flavor and vitamin stability (with no "off flavor or color").

START USING DIAMOND CRYSTAL FLAKE SALT IN YOUR OPERATION RIGHT AWAY. AVAILABLE IN A VARIETY OF SCREENINGS.

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Diamond Crystal Salt Co.

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Gold Medal Equipment and Supplies Indicies

150 Years of Effort Produced Today's Foods 35

The anniversary of the invention of the metal can is a milestone in industry progress—By William E. Vaughn, president of the C. M. & S. A.

1960 Gold Medal Awards 36

The top developments—now or improved equipment or supplies—announced since May 1959.

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Classified List of Suppliers 53

Names of suppliers, listed under 230 categories of food equipment and supplies in nine sections.

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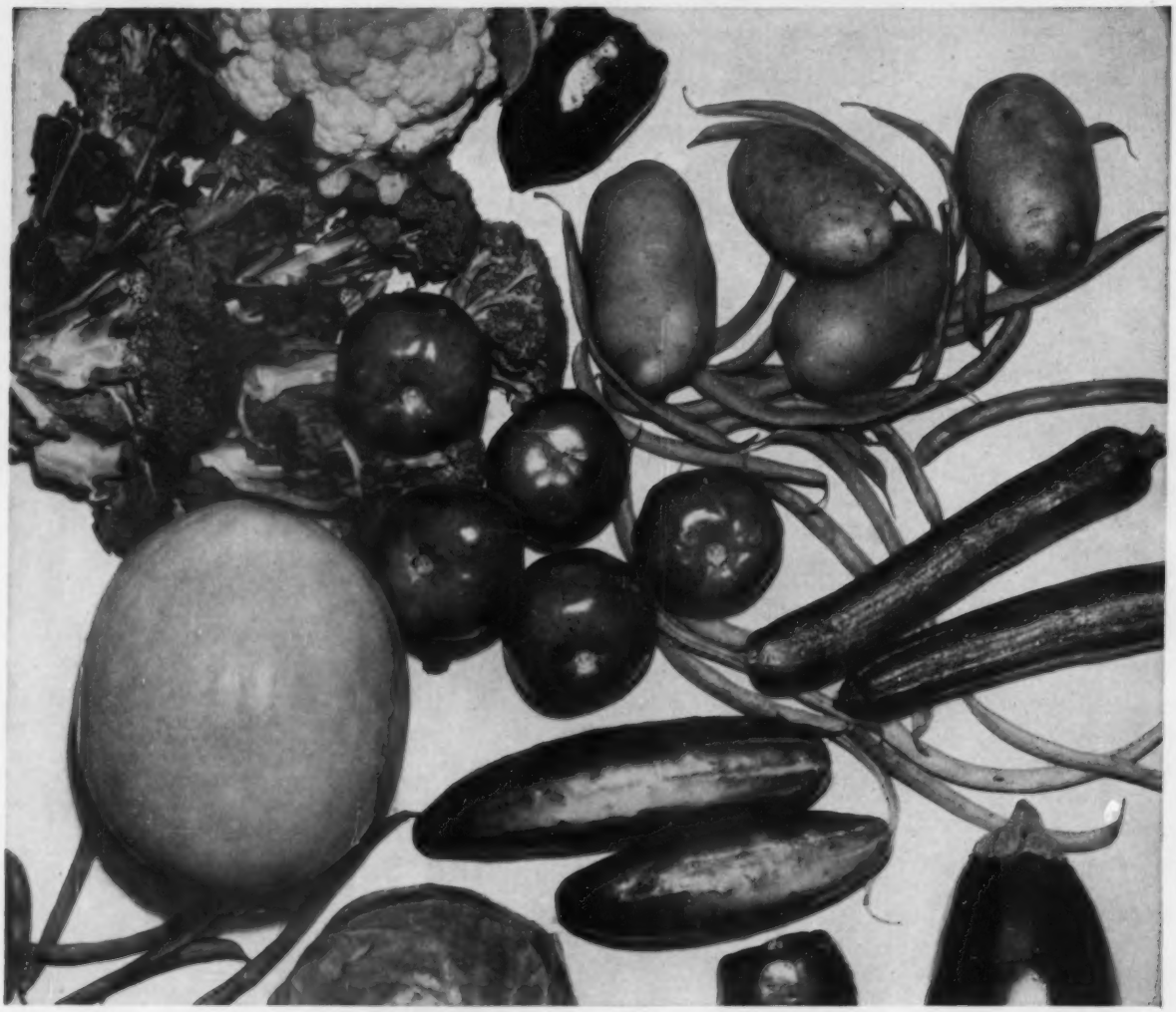
Literatures of 100 manufacturers of equipment and supplies in the food industry, offered to readers.

SPECIAL: The Canning Industry's 150th Birthday 94

A review of the technical developments of the canning industry—and the implications for the future.



now...use Thiodan® on all these

Broader registration for Thiodan —powerful new insecticide—gives you effective, economical control of aphids and many other important insects this season.

Thiodan cleans up heavy aphid infestations where other sprays and dusts fail. It outperforms previously available materials; fewer applications give positive, long-lasting control of a wide range of vegetable insect pests.

CROP	TO CONTROL	APPLICATION
Beans	Mexican bean beetle	Up to pod formation
Broccoli Cabbage Cauliflower	Cabbage looper, imported cabbage worm, diamond-back moth larvae	Up to formation of edible parts
Cucumbers Melons Squash	Aphids	Up to 14 days prior to harvest
Eggplants, Peppers	Aphids	Up to 7 days prior to harvest
Potatoes	Flea beetle, Colorado potato beetle, leafhoppers, aphids, southern armyworm, green stink bug, potato tuberworm, leaf-footed plant bug	
Tomatoes	Aphids, whitefly	Up to 7 days prior to harvest

Thiodan®

TECHNICAL CHEMICAL DEPT., NIAGARA CHEMICAL DIVISION, FOOD MACHINERY AND CHEMICAL CORPORATION, MIDDLEPORT, N. Y.

150 Years of Effort by Canners and Suppliers Produced Foods of Today

By William E. Vaughn

It is an old American custom—and a good one, too—for everyone to join in the birthday celebration of an industry which has played such an important part in the growth and development of this great nation. This 1960 celebration of the 150th Anniversary of the metal can and the anniversary of canning, seems to have been almost pre-planned by the fathers of the canning industry. The results of the initial invention, which came of necessity to extend the abundance of the harvest, now, not only provide the basic foods for the Atomic Age but are essential as we enter the Frontiers of the Space Age.

This year's celebration also marks a century and a half of canner-supplier research and development. Until the advent of labor-saving machinery and automatic equipment, the production and unit cost of canned foods was directly related to the number of production workers. Industry statistics, collected from the turn of the century, show that while the value of the canners products has increased fifty times (from 100 million to 5 billion dollars), the number of production workers has increased only slightly more than three times (57,012 to 174,920). Just as the canner has brought forth new food products and increased production, the machinery and supplies industry has continuously improved the various types of machinery, developed new production devices, techniques, supplies, and services, thereby enabling the processors to constantly improve quality and production, and effectively meet competition.

Mr. Vaughn is president of the Canning Machinery and Supplies Assn. and is vice-president of American Can Co.

Thus, we are automatically also paying tribute to those scientists and mechanical geniuses with the foresight to design and produce the machinery to sow the specially developed seeds, and harvest the acres of fruits and vegetables at the peak of perfection; to those who provided devices to clean, peel, pit, and slice food, and bring it together with the containers for filling, seasoning, closing, and cooking; and to those who mechanized the handling of the seemingly endless stream of containers, making it possible to wrap each with a truly magnificent reproduction of the contents, then quickly but gently, fill the cartons for safe shipment to consumers everywhere.

Every case of canned food, as it leaves the cannery, carries with it the sum total of one hundred and fifty years of canner-supplier research and development.

Canner-supplier success in developing volume production of canned foods has been greatly assisted by the excellent communications within the industry. The very nature of the industry which demands full production at the time of harvest, requires that production procedures be continuously researched. One of the most effective and stimulating methods utilized by the industry, is the meeting of contemporaries at the annual Canners' convention. The nucleus of the convention, CM&SA's educational exhibit, in addition to bringing together the industry's production needs, serves as the center for canner-supplier conferences. Here, immediate needs are fulfilled and future production plans explored. It is interesting to know that in the conferences with industry representatives from throughout the country, many production problems have been solved. The industry's business journals are to be commended for their reporting and recording of production improvements, making it possible for the individual food processor to evaluate his own production techniques.

In this 150th year of our great industry, the canner and the supplier still retain the same objective, and that is, to serve the public by producing a safe and dependable supply of canned foods. Canner-supplier research and development is indicative of the fact that the goal today is no different than it was a century and a half ago.

Here Are the Winners of Gold Medal Award Competition

The Canner/Packer Gold Medal Awards are given each year to manufacturers of new or significantly improved products used in the processed foods industry.

Nominations are invited from all manufacturers of equipment and supplies who have introduced new products during the preceding year.

Plate Evaporator for Citrus. This evaporator is a high temperature, short time unit. Orange juice is stabilized at 190° (20 seconds) and 120°

(40 seconds) to produce a 65° Brix product in two effects. Floor space is ½ and head room 1/3 conventional citrus juice evaporators.

A.P.V. Company, Inc., 37 Arthur St., Buffalo, N. Y.—No. 1.*

Air Chain Conveyor System. This Air Chain consists of two rows of roller conveyor with track chain centered between rows. Activated by air, the chain moves pallets of material both forward and in reverse. It can be used

in plant, trailer, or on dock. Virtually damage free, this is a quick, dependable way of moving palletized loads of material.

Alvey Conveyor Mfg. Co., 9301 Olive Street Road., St. Louis 32, Mo. —No. 2.*

End/Top Loading Container. The Convertabox is a corrugated container designed to combine all the good features of end loading with the ad-

vantage of easy top loading. These features are achieved by a system of perforations that do not lessen the container's efficiency.

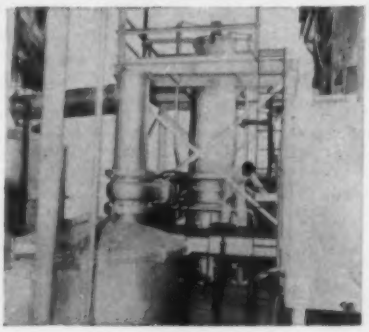
American Box Corp., 2740 Hyde St., San Francisco, Calif.—No. 3.*

Ozone Resistant Insulation. Armaflex 22 is a foamed, plastic pipe covering insulation which can be used from below zero to 220° F. Product is ozone resistant and can be applied to sharp bends and elbows without danger of fissuring or cracking at areas under strain. It is recommended for

liquid heating and cooling lines and other refrigeration applications.

Armstrong Cork Co., West Liberty, St., Lancaster, Pa.—No. 4.*

Thin Film Evaporator. The Roto-Vak assures continuous, profitable processing of viscous, foamy, salting and heat-sensitive products. Product quality is improved because of short controlled contact time and superior heat transfer rates due to the very turbulent, thin-film action. It also assures successful contacting through a wide



temperature range.

Blaw Knox Co., Buflovak Equipment Div., 1543 Fillmore Ave., Buffalo 11, N. Y.—No. 5.*

Case Printer. CRCO Model CP Case Printer prints sides and/or ends of shipping cases in a straight line operation. Installation should be made at discharge of case sealer or in conveyor line. Printing drum can be easily

removed for cleaning or changing of type.

Chisholm Ryder Co. of Penna., Hanover, Pa.—No. 6.*

Beaded Open Top Can. This 303 x 406 open top can has a fully beaded body. It is used for packing selected fruit and vegetable products. This type of body construction increases panel resistance, reduces shipping and handling damage, and reduces denting and out-of-round containers. It is

being offered at same price as present unbeaded cans of same size.

Continental Can Co., 100 East 42nd St., New York 17, N. Y. —No. 7.*

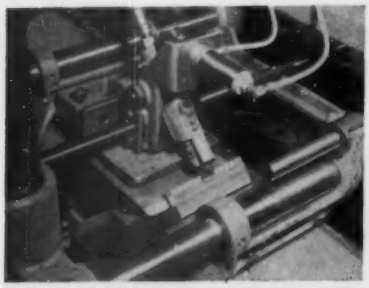
Insecticide Applicator. Dyna-Fog "50" is a light-weight, portable insecticide fogging machine. It gives immediate results without dangerous residue

***Want More Information? Circle the number of the item on the Inquiry Card, Page 81-82.**

for inplant or outdoor control.

Curtis Automotive Devices, Inc., Dyna-Fog Products Div., P.O. Box 297, Westfield, Ind.—No. 8.*

Glu-Line System. Neat, stingy and efficient system for applying glue to flaps of corrugated cases. Glue is fed under light pressure (2 p.s.i.) from



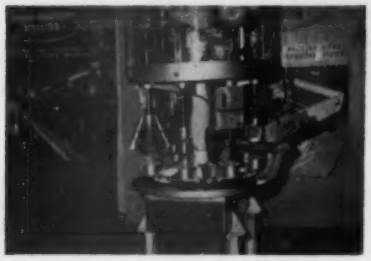
reservoir through hoses into applicators. Applicators apply glue to flaps in narrow strips with skip-gap. Glue pots and rollers — and associated maintenance problems—are eliminated.

Emhart Manufacturing Co., Portland Div., 127 Main St., Portland, Conn.—No. 9.*

Fibreflo Carton. This is a new liquid tight, reclosable corrugated container. Non-fragile, light-weight and economical, it will hold a variety of liquid products.

Fibreboard Paper Products Corp., 475 Brannan St., San Francisco, Calif. —No. 10.*

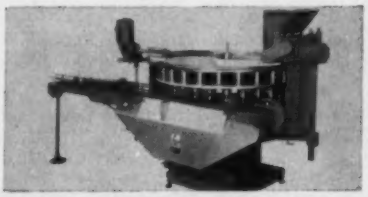
Grapefruit Peeler. This machine peels grapefruits automatically. It receives whole fruit, removes the peel, and



discharges the peeled fruit.

Florida Div., Food Machinery and Chemical Corp., Lakeland, Fla.—No. 11.*

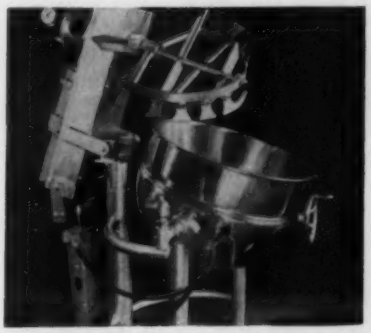
Filling Machine. FMC Flexi-Filler is designed to fill granular free-flowing products into cans traveling in straight line and at high operating speeds.



Handles cans positively; has an individual cut-off gate, and a no-can—no-fill device. Automatic hopper and rotary brush provide fully-automatic line.

Food Machinery and Chemical Corp., P.O. Box 1120, San Jose, Calif. —No. 12.*

Heavy Duty Agitated Kettle. This steam-jacketed kettle was developed for products with a putty-like consistency. It has extra heavy construction, a heavy-duty double motion agitator, a bored agitator shaft for obtaining temperature readings at bottom of the batch, an auxiliary nylon taper centering bearing in the bottom of the kettle



to stabilize the agitator shaft. Kettle capacity is 60 gallons.

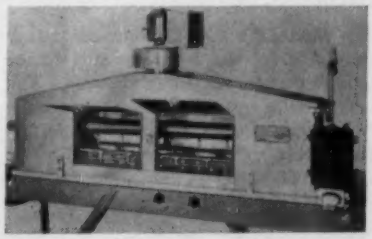
Hamilton Kettles Division of the Brighton Corp., 820 State Ave., Cincinnati 4, Ohio.—No. 13.*

Horizontal Packaging Machine for Film. The Hayssen RT Packaging Machine was developed to handle products such as spaghetti, sliced meat, cheese, etc. The product is fed directly to the web of packaging material from

the infeed conveyor and is carried through the packaging and sealing cycle untouched by machine parts. Gas flushing attachments can be used. A wide range of hermetically sealed packages can be formed. Change over is simple and fast, with no parts changes required.

Hayssen Mfg. Co., 1305 St. Clair Ave., Sheboygan, Wis.—No. 14.*

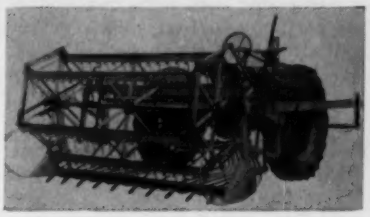
Sterilizer-Cleaner. This machine was developed for wide-mouth jars and sanitary cans. It cleans outside, steri-



lizes and cleans the inside of containers. A heat exchanger furnishes dry and slightly super-heated steam to nozzles. Steam is shut off automatically after last container. The machine handles 250 containers per minute.

Horix Manufacturing Co., 2601 Chartiers Ave., Pittsburgh, Pa.—No. 15.*

Pea Harvester. A new green pea harvester is designed to reduce field maintenance costs through elimination of the draper and other working parts. A rod-type windrower delivers loose, even windrows in the center of the



swath. The machine "opens up" fields without the necessity of a back swath.

H. D. Hume Company, Mendota, Ill.—No. 16.*

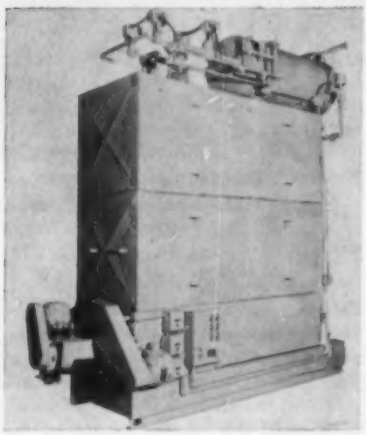
Air Screen for Insects. The Air Kurtain is designed to provide a controlled high-velocity jet across the doorway to discourage entrance of flies, gnats, dust, etc. The angle and the width of the air curtain can be adjusted.

The King Company of Owatonna,

Awards

902-10 North Cedar St., Owatonna, Minn.—No. 17.*

Ice Maker. A high-capacity ice maker designed for use by processors to ice foods being held for processing. The machine is simple to operate, with an automatic control panel. No insulated outer room is needed; the unit can be placed outdoors. Housings are easi-



ly removable and fully insulated to prevent loss of refrigeration. The unit dismantles into three packages. The Krackice Maker is capable of delivering high ice yield per cubic foot of space occupied.

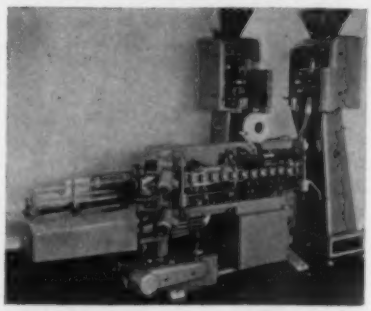
Kohlenberger Engineering Corp., 1600 West Commonwealth Ave., Fullerton, Calif.—No. 18.*

Automatic, Sanitary Valve: The Tri-Clover, Air-Actuated Sanitary Valve

is designed for automated installations such as recirculation operations for in-place cleaning, or in a single operation, such as on a filling machine.

Ladish Co., Tri-Clover Div., Kenosha, Wis.—No. 19.*

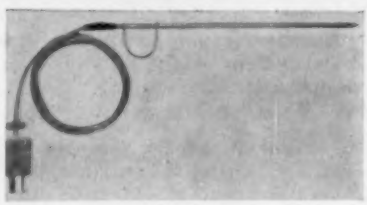
Sift-Proof, Moisture-Resistant Carton: The Expresso system, was developed to provide a single package that has sift and moisture proof characteristics for frozen foods, cake mixes, coffee, tea, salt, and dry milk. A cover paper



is sealed over the open ends to provide the moisture barrier. Packaging machinery automatically opens cartons, seals cover paper across bottom, closes flaps, fills, heat seals top, and closes top flaps.

Mead Packaging, a division of the Mead Corporation, P.O. Box 4417 Atlanta 2, Ga.—No. 20.*

Temperature Probe for Frozen Foods. A Sabrecouple temperature probe is designed for use in checking temperatures of frozen foods. A strip chart recorder provides up to 24 individual



records of temperatures from 24 points. The probe from 2-4 in. long is used in measuring internal temperatures of frozen food packages, checking temperatures of foods during loading or unloading.

Industrial Div., Minneapolis-Honeywell Regulator Co., Philadelphia 44, Pa.—No. 21.*

Heat-Stable Starch. Col-Flo 67 is a food starch refined from waxy maize used for canned and frozen fruit pie fillings, gravies, sauces, etc. When cooked it is smooth and short textured, bland flavored. It is translucent to clear, glossy. It is exceptionally stable with little tendency to set to a jel, and has unusual freeze-thaw stability.

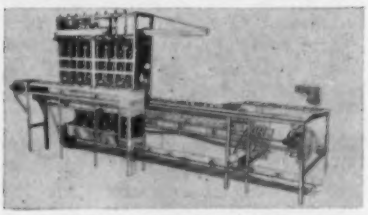
National Starch and Chemical Corp., 750 Third Ave., New York, N. Y.—No. 22.*

Processing Variety Sweet Corn. Sweet corn NK 87 is a high-yielding golden

hybrid of 87 days maturity. It is wilt-resistant and can be used widely. The ear is white-silked, 8-9 inches long, 2¼ inches in diameter, with deep, narrow kernels with a bright yellow color.

Northrup, King & Co., 1500 Jackson St., N.E., Minneapolis 13, Minn. —No. 23.*

Apple Transfer. This machine was designed to eliminate some of the hand



labor in inspecting and trimming cored and peeled apples. The coring mechanism automatically transfers the apple to a revolving spindle where it is moved past the inspectors. Apples that need trimming are flipped off spindle. Apples that do not need trimming are not handled, but delivered directly to the slicers.

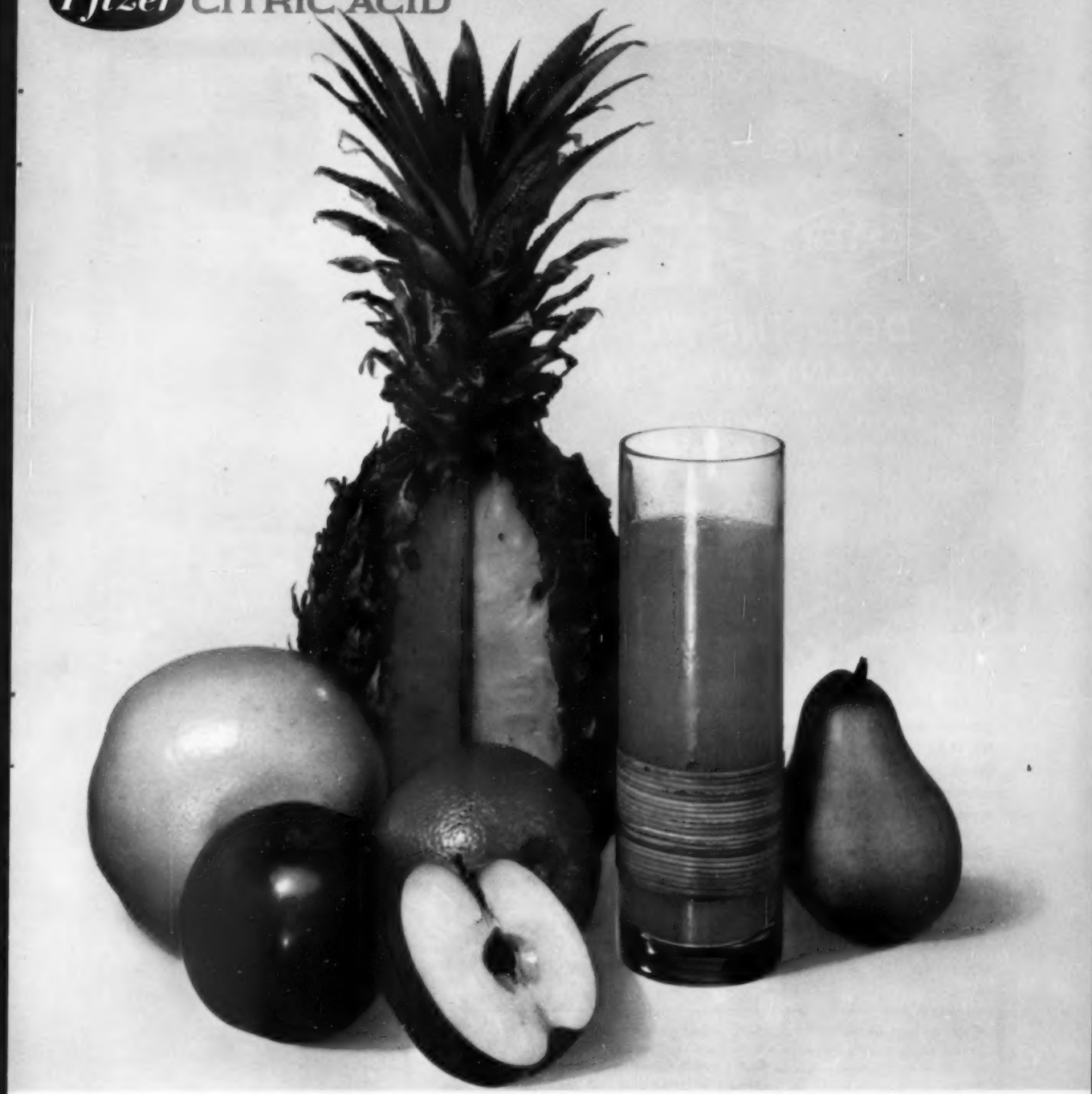
F. B. Pease Co., 1450 E. Henrietta Road, Rochester 23, New York.—No. 24.*

GOLD MEDAL AWARDS

(Continued on Page 41)

***Want More Information? Circle the number of the item on the Inquiry Card, Page 81-82.**

Pfizer CITRIC ACID



Nature's Acidulant GIVES YOUR FRUIT JUICE BLENDS AN AUTHENTIC, NATURAL TANGINESS!

Citric acid is nature's way of bringing out the full flavor of fruit. This is exactly the same kind of benefit your fruit juice blends get from Pfizer Citric Acid.

Pfizer pioneered the production of citric acid in America. Supplying the food industry since 1880, the Pfizer name on the label is your assurance of highest quality and uniformity at lowest cost. Now, with warehouses strategically located throughout the country, you can rely on delivery where you need it and when you need it.

When it comes to citric acid, think of Pfizer first.

Science for the world's well-being

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Quality Ingredients for the Food Industry for Over a Century

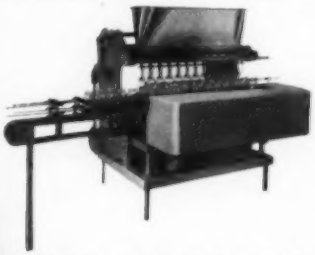
CHAS. PFIZER & CO., INC. • Chemical Sales Division, 630 Flushing Avenue, Brooklyn 6, N. Y.

Branch offices: Clifton, New Jersey • Chicago, Illinois • San Francisco, California • Vernon, California Atlanta, Georgia • Dallas, Texas • Montreal, Canada.

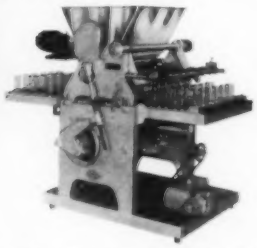
ONE VERSATILE GEYER PISTON FILLER

DOES THE WORK OF MANY MACHINES–

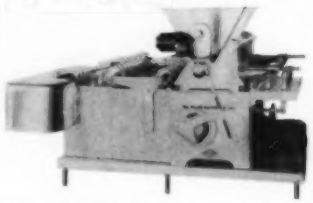
saves you money because it fills a wide variety of containers and is adaptable to a wide range of liquid, semi-liquid or semi-solid products.



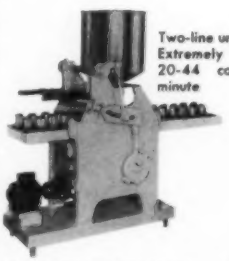
High speed twelve-line SL-58 Filler for containers up to 1 quart



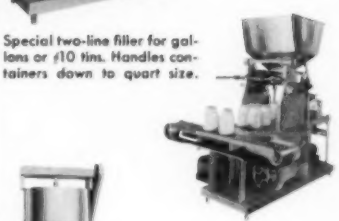
Six-line universal model—fills 90-144 containers per minute



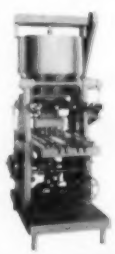
Ten-line Filler with built-in roll-over cleaning device



Two-line universal model. Extremely rugged, fills 20-44 containers per minute



Special two-line filler for gallons or #10 tins. Handles containers down to quart size.



Two-line special model for filling process cheese in ½ lb to 5 lb boxes.

GEYER Fillers give you a competitive advantage because of their greater versatility, easier cleaning and changeover, and more accurate fill. They combine high production rates with engineered features that insure long life and a bare minimum of maintenance. Proof of their economy and efficiency is their acceptance in some of the largest and most efficient food, bakery, chemical and drug plants in the country.

Get a GEYER Filler and get these advantages:

FASTER FILLING—up to 290 containers a minute

VERSATILITY—adaptable to a wide range of containers and products, even delicate fruits

ACCURATE FILL—by clean cut-off or bottom-up method

SMOOTHEST OPERATION—without vibration or jerking

EASE OF CLEANING AND QUICK CHANGE-OVER—in minutes

ONE MAN OPERATION—even at highest speeds

Models from 2-line Fillers handling 40 containers a minute to 12-line Fillers that fill up to 290 containers a minute • Process Cheese Fillers • Gallon Fillers • Batter Depositors • Fillers with lid dropper and presser • Cartridge Fillers • Feed, fill and cap machines • Hand and semi-automatic models • Full line of accessories and supplementary equipment

Write, wire or phone for information or recommendations on your requirements

GEYER

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THE FILLER MACHINE COMPANY

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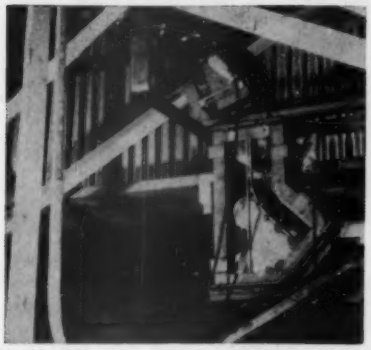
FREE–

Send for this informative, helpful catalog on filling machines.

GOLD MEDAL AWARDS

(Continued from Page 38)

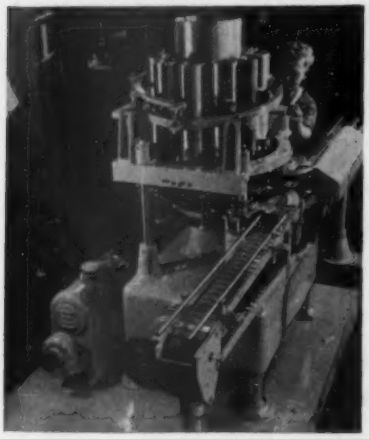
Can Line Control. The PECO Can-Flo Divider uses electromagnetic force to switch cans from trunk lines to



branch lines at modern high speeds. Divider has no moving parts, automatically keeps branch lines full.

PECO Corp., 111 Ortega Ave., Mountain View, Calif.—No. 25.*

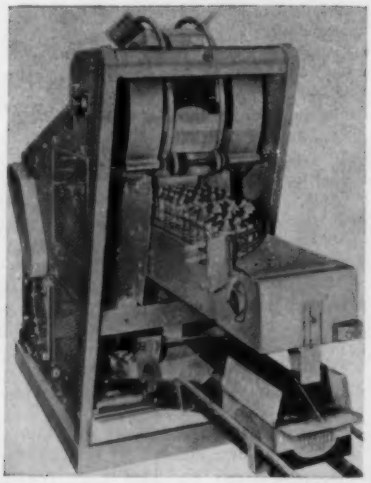
Rotary Piston Filler. Pfaudler's new ten-station filler for packing glass, paper or pre-pack containers, fills up to 300 containers per minute with accuracy of 1/10 fluid oz. Easily ad-



justed for change in container height up to 3¼ in. Cleaning requires moving only valves and pistons, with no adjustments required on reassembly.

Pfaudler Co., Division of Pfaudler Permutit, 1000 West Ave., Rochester 3, N. Y.—No. 26.*

Uncaser. The BMU-2A uncaser unloads single-layer packed cases of bottles, cans or jars at speeds of up to 50 cases per minute. Cases handled range from 4-8 in. in height, and changeover for various heights can be made in less than 15 minutes.



Radio Corporation of America, Front & Cooper Sts., Camden 2, New Jersey.—No. 27.*

Processing Wax Bean. Earliwax variety is a development from the Puregold Wax strain, bred for earlier harvest and mechanical picking. It has a low fiber content and is resistant to common bean mosaic diseases. It is a 56 day bean that develops its color in the small sieve sizes. It has white seeds and slim, round pods.

Rogers Borthers Company, Idaho Falls, Idaho.—No. 28.*

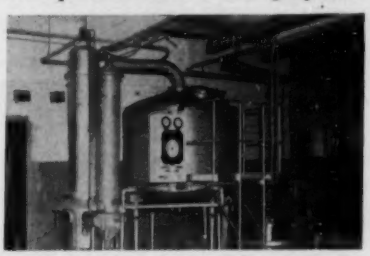
Sweet Corn for Processing. A new variety of sweet corn, Tenderfine, has a high percent of recovery due to deep kernels and small cob. It has white silk, good tip cover and drought resistance.

Seed Research Specialists, Inc., P.O. Box 3091, Modesto, Calif.—No. 29.*

Vibrating Feeder for Freezers. The Stainless Steel Feeder feeds four tons of corn or peas per hour the entire width of the freezing belt. Product is dewatered and then moved to a diagonal slot where it is distributed to the correct depth across the feeding belt.

Simplicity Engineering Co., Durand, Mich.—No. 30.*

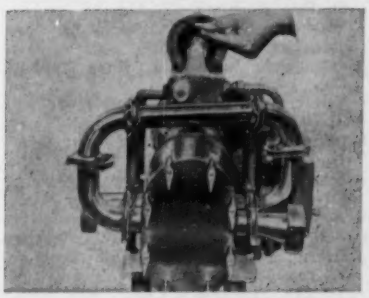
Large Diameter Vacuum Kettle. A vacuum preserve kettle with an essence recovery unit has a large diameter and a minimum depth to process 400 gallon batches. The unit was designed to have a minimum of rolling action during boiling in order to keep fruit particles from breaking up. The



unit operates at 26 in. Hg. Condensed essenses are added just before filling.

Thermovac Inc., Box 209, Stockton, Calif.—No. 31.*

Metered Flow Control Pump. Waukesha MFC-250 a sanitary pump transfers and measures materials of varying viscosities and physical characteristics with accuracy of better than ½ of 1%. This degree of accuracy is an essential factor in the food process-



ing industries where accurate measuring of the product is necessary.

Waukesha Foundry Company, Pump Division, Waukesha, Wis.—No. 33.*

***Want More Information? Circle the number of the item on the Inquiry Card, Page 81-82.**

Alphabetical List of Suppliers

ABC Packaging Machine Corp., Box MM, Tarpon Springs, Fla.
APV Co., Inc., 137 Arthur St., Buffalo 7, N. Y.
Abbott Laboratories, 14th and Sheridan, North Chicago, Ill.
Ace Specialty Mfg. Co., 9616 East Valley Blvd., Rosemead, Calif.
Acme Steel Co., 135th & Perry Ave., Chicago 27, Ill.
• Adair, Robin W. Company, Inc., Avoca, N. Y.
Addressograph-Multigraph Corp., 1200 Babbitt Rd., Cleveland 17, Ohio
Adhesive Products, Inc., 520 East Shore Hwy., Albany 10, Calif.
Advertising Checking Bureau, 18 So. Michigan Ave., Chicago 3, Illinois.
Airkem, Inc., 241 East 44th St., New York 17, N. Y.
Ajusto Equipment Co., 515 Conneaut St., Bowling Green, Ohio.
Albertoli, John, 418 Beach St., San Francisco, Calif.
Albright Co., Thomas, 814 E. Jefferson, Goshen, Ind.
Algene Marking Equipment Co., 232 Palisade Ave., Garfield, N. J.
Allen Cartons, Inc., Dayton, Ohio
• Allen Fruit Co. Inc., Machinery Div., P. O. Box 352, Newberg, Ore.
Allen Machinery and Equipment Co., 600 16th St., Oakland 12, Calif.
Allied Chemical Corp., Nitrogen Div., New York, N. Y.
Allied Mfg. & Sales Co., 3101 W. Grand, Chicago 22, Ill.
Allis Chalmers Mfg. Co., Tractor Group, 1125 S. 70th
• Alloy Wire Belt Co., 210 Phelan Ave., San Jose 12, Calif.
Alsop Engineering Corp., 104 Madison St., Milldale, Conn.
Aluminum Co. of America, 1501 Alcoa Bld., Pittsburgh 19, Pa.
St., Milwaukee, Wis.
Alvey Conveyor Mfg. Co., 9301 Olive St. Rd., St. Louis 32, Mo.
Alvey-Ferguson Co., 75 Disney St., Cincinnati 9, Ohio
Amalgamated Sugar Co., First Security Bldg., Ogden, Utah
• American Box Corp., 2740 Hyde St., San Francisco 19, Calif.
• American Can Co., Canco Div., 100 Park Ave., New York 17, N. Y.
American Cyanamid Co., Agr. Chems., Div., RCA Bldg., 30 Rockefeller Plaza, New York 20, N. Y.
American Express Field Warehousing Corp., 65 Broadway, New York 6, N. Y.
American Machinery Corp., Box 3228, Orlando, Fla.
American Maize Products Co., 250 Park Ave., New York 17, N. Y.
American Molasses Co., 120 Wall St., New York 5, N. Y.
American Optical Co., Instrument Div., Eggert Road, Buffalo 15, N. Y.
American-Standard Industrial Div., 8111 Tireman Ave., Detroit 32, Mich.
American Sugar Refining Co., 120 Wall St., New York, N. Y.
American Viscose Corp., 1617 Pennsylvania Blvd., Philadelphia 3, Pa.
Amerio Contact Plate Freezers, Inc., 280 Gorge Road, Cliffside Park, N. J.
Anaconda Aluminum, Container Div., Louisville, Ky.
• Anchor Hocking Glass Corp., Package Div., 40 Glass Ave., Lancaster, Ohio
Anderson Bros. Manufacturing Co., 1907 Kishwaukee St., Rockford, Ill.
• Angelus Sanitary Can Machine Co., 4900 Pacific Blvd., Los Angeles 58, Calif.
Anheuser-Busch, Inc., 721 Pestalozzi St., St. Louis, Mo.
Arabol Mfg. Co., 110 E. 42nd St., New York 17, N. Y.
Archibald & Kendall, Inc., 481 Washington St., New York 13, N. Y.
Arlington Industries, 1513 North Shore Road, Revere 51, Mass.
Armour Alliance Industries, 16123 Armour St., N.E., Alliance, Ohio
Armstrong Corls Co., Liberty and Mary Sts., Lancaster, Pa.
• Aseptic-Thermo Indicator Co., 11471 Vanowen St., N. Hollywood, Calif.
Asgrow Seed Company, 272 George St., New Haven 10, Conn.
• Ashlock Co., Geo. W., 855 W. Ave. 135, San Leandro, Calif.
Ashworth Bros. Inc., P. O. Box 278, Winchester, Va.
Associated Bag & Apron Co., 901 W. Huron St., Chicago 22, Ill.
Associated Specialties Co., 24555 W. Eight Mile Road, Detroit, Mich.
Atkron, Inc., P.O. Box 311, Cuyahoga Falls, Ohio
Atlas-Pacific Engineering Co., 67th and Hollis Sts., Emeryville, Calif.
Atwood Adhesives, Inc., 1000 Eighth Ave., So., Seattle 99, Wash.
Audubon Metalwove Belt Div., Richmond & Castor, Philadelphia 34, Pa.

B

B-I-F Industries, Inc., 345 Harris Ave., Providence, R. I.
Baker Industrial Trucks Div., Otis Elevator Co., 8000 Baker Ave. N.W., Cleveland 2, Ohio
Baldwin Lima Hamilton Corp., Industrial Equipment Div., Philadelphia 42, Pa.
Ball Brothers Co., Muncie, Ind.
Ball, Inc., George J., West Chicago, Ill.
Baltimore Spice Co., Baltimore 8, Md.
Barker Co., 5812-22nd St., Tampa 4, Fla.
Barkley & Dexter Labs, Inc., South Frankfort St., Fitchburg, Mass.
Barnstead, Still and Sterilizer Co., 2 Lanesville Terrace, Forest Hills 38, Mass.
Barrett-Cravens Co., 630 Dundee Road, Northbrook, Ill.
Barry-Wehmiller Machinery Co., 4660 W. Florissant Ave., St. Louis 15, Mo.
Bartelt Engineering Co., 1900 Harrison Ave., Rockford, Ill.
Basic Food Materials, Inc., P.O. Box D, Vermillion, Ohio
Basic Vegetable Products, 315 Montgomery St., San Francisco 4, Calif.
Battle Creek Packaging Machines, Inc., 12th St. & Ave. C, Battle Creek, Mich.
Baur Bros. Co., Springfield, Ohio
Bausch & Lomb Optical Co., 60560 Bausch St., Rochester 2, N.Y.
Beckman Instruments, Inc., 2500 Fullerton Rd., Fullerton, Calif.
Bell-Mark Corp., 18 Ropes Place, Newark 7, N. J.
Belt-Ice Corp., 3400 16th Ave .W., Seattle 99, Wash.
Bemis Bro. Bag Co., 111 N. Fourth St., Box 75, St. Louis 2, Mo.
• Benner-Nawman, Inc., 3421 Hollis St., Oakland, Calif.
• Berlin Chapman Co., Berlin, Wis.
Bernardin Bottle Cap Co., 2201 W. Maryland St., Evansville 12, Ind.
Bethlehem Steel Co., Bethlehem, Pa.
Biner-Ellison Machinery Co., 1101 N. Main St., Los Angeles 54, Calif.
Bliss Co., E. W., 1375 Raff Rd., S. W., Canton, Ohio
Borden Co., 350 Madison Ave., New York 17, N. Y.
Boutell Mfg. Co., Lois and Rutter, Rochester, N. Y.
Bowen Engineering Co., North Branch 3, N. J.
Boyertown Auto Body Works, Inc., Third & Walnut Sts., Boyertown, Pa.
Brady Co., W. H., 737 W. Glendale Ave., Milwaukee, Wis.
Brewers & Bottlers Equipment Corp., 104 Asylum St., Hartford 3, Conn.
Bridge Machine Co., Palmyra, N. J.
Brilmayer Labs, E. W., 86 Fulton St., New York 38, N. Y.
Bristol Co., P.O. Box 1790 CP, Waterbury 20, Conn.
• Brockway Glass Co., Inc., Brockway, Pa.
• Brook Motor Corp., 3302 W. Peterson Ave., Chicago 45, Ill.
Brooks Chemicals, Inc., 3304 E. 87th St., Cleveland 27, Ohio
Brown Co., Clarence, Box 1373, Modesto, Calif.
Brown Citrus Machinery Corp., 401 S. Greenleaf Ave., Whittier, Calif.
Brown Filling Machine Co., Ann Arbor, Michigan
Buffalo Meter Company, Inc., 2910 Main St., Buffalo 16, N. Y.
Buffalo Turbine Agricultural Equipment Co., 68 Industrial St., Gowanda, N. Y.
Buffalo Weaving and Belting Co., 260 Chandler St., Buffalo, N. Y.
Buflovak Equipment Div., Blaw-Knox Co., 1637 Fillmore Ave., Buffalo 11, N. Y.
Burpee Co., W. Atlee, Huntington Pk. Ave. & 18th St., Philadelphia 40, Pa.
Burrell Seed Growers Co., D. V., P.O. Box 150, Rocky Ford, Colo.
Burt Co., F. L., 571 Seventh St., San Francisco, Calif.
• Burt Machine Co., 401 East Oliver St., Baltimore 2, Md.
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• Cambridge Wire Cloth Co., Cambridge, Md.
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Carnation Co., Can Div., 5045 Wilshire Blvd., Los Angeles, Calif.
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Cascade Container Corp., P.O. Box 300, Walla Walla, Wash.
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Chain Belt Co., 4701 West Greenfield, Milwaukee 1, Wis.
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Champion Corp., 4714 Sheffield Ave., Hammond, Ind.
Champion Paper and Fibre Co., Hamilton, Ohio.
Champion-Pneumatic Machy. Co., 825 N. Pleasant St., Princeton, Ill.
Chapman Chemical Co., Wood Preservative Div., 60 N. Third St., Memphis, Tenn.
Charter Seed Co., 1124 Merican St., San Jose, Calif.
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• Chisholm-Ryder Co. of Penna., Blettner Ave., Hanover, Pa.
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Clark Door Co., 15 Hunterdon St., Newark 8, N. J.
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• Clinton Corn Processing Co., Clinton, Ia.
• Clipper Belt Lacer Co., 974 Front Ave., Grand Rapids 2, Mich.
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Cog Corp., 4389 W. Lake St., Chicago 24, Ill.
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Colorado Fuel and Iron Corp., Continental Oil Bldg., Denver 2, Colo.
Colton Co., Arthur, 3400 East Lafayette, Detroit 7, Mich.
Columbia Engineering Sc. Co., 4025-37 Sebastopol Highway, Santa Rosa, Calif.
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Consolidated Syphone Supply Co., 22 Wooster St., New York City, N.Y.
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Cornell Paperboard Products Co., Div. of St. Regis Paper Co., 1514 E. Thomas Ave., Milwaukee, Wis.
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Corrigan Co. Inc., J.C., 41 Norwood, Boston 22, Mass.
Crane Co., 4100 S. Kedsie Ave., Chicago, Ill.
• Creamery Package Mfg. Co., 1243 W. Washington Blvd., Chicago 7, Ill.
Crest Foods Co., Ashton, Ill.
Crocker Co., H. S., 1000 San Mates Ave., San Bruno, Calif.
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• Cromwell Paper Co., 180 N. Wabash Ave., Chicago 1, Ill.
• Crown Cork & Seal Co., Inc., 9300 Ashton Road, Philadelphia 36, Pa.
• Crown Zellerbach Corp., Western-Waxide Div., 2199 Williams St., San Leandro, Calif.
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Curtis Automotive Devices, Inc., Dyna-Fog Products Div., P. O. Box 297, Westfield, Ind.
Cuyler Corp., Otto W., Webster, N. Y.
Cyclomatic Freezing Systems, Div. of Texstar Corp., 237 Lancaster Ave., Devon, Pa.
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D

D and M Products, Inc., 26 N. Raymond Ave., Pasadena 1, Calif.
Darworth, Inc., Chemical Products Div., Simsbury, Conn.
Day Co. Div., J. H.; Cleveland Automatic Machine Co., 4932 Beech St., Cincinnati 12, Ohio
Daystrom, Inc., Weston Instruments Div., 614 Freilinghuysen Ave., Newark 12, N. J.
Dazey Corp., The, 4301 Warne Ave., St. Louis 7, Mo.
Dennison Mfg. Co., 300 Howard St., Framingham, Mass.
Detrex Chemical Industries, Inc., Box 501, Detroit 32, Mich.
Dewey & Almy Chemical Div., W. R. Grace & Co., 62 Whittemore Ave., Cambridge 40, Mass.
Diagraph-Bradley Ind., Inc., P.O. Box 269, Herrin, Ill.
Diamond Chain Co., Inc., 402 Kentucky Ave., Indianapolis, Ind.
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Dodge and Olcott, Inc., 180 Varick St., New York 14, N. Y.
Dole Refrigerating Co., 5910 N. Pulaski Road, Chicago 30, Ill.
Douglas-Guardian Warehouse Corp., 118 N. Front St., New Orleans, La.
Dow Canvass Products Co., 2705 Calumet Ave., Manitowoc, Wis.
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• Dow Corning Corp., Midland, Mich.
DuBois Chemicals, Inc., Broadway at 7th, Cincinnati 2, Ohio
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Dundon Iron Works, 2285 Jerrold Ave., San Francisco 24, Calif.
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Durant Mfg. Co., 1900 N. Buffum St., Milwaukee 1, Wis.
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E

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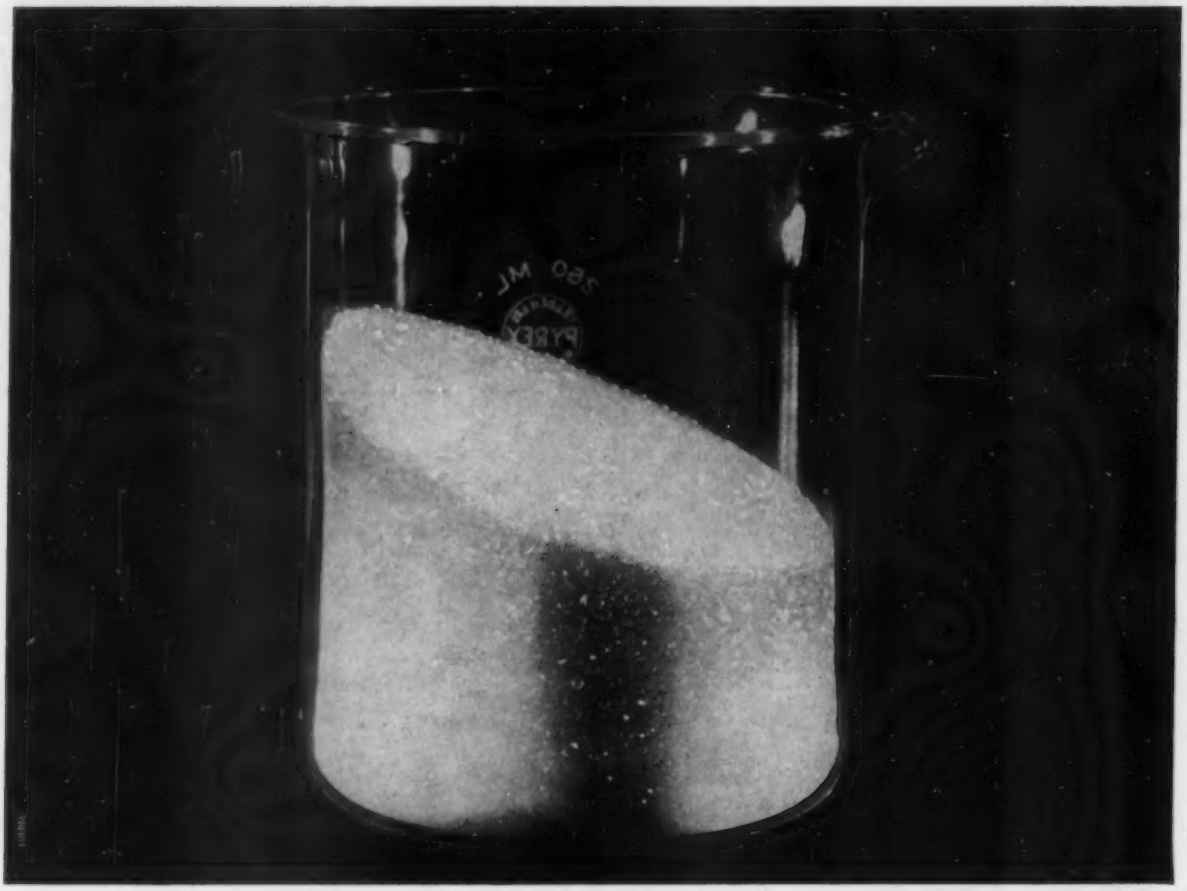

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F

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Food Packers, Inc., 804 East 8th St., P. O. Box 390, New Albany, Ind.
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Foster Forbes Glass Co., Marion, Ind.
Fostoria Corp., 1200 North Main St., Dept. D-10, Fostoria, Ohio
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Foxboro Co., 38 Neponset Ave., Foxboro, Mass.
Frick Co., Main St., Waynesboro, Pa.
Fries and Fries, Inc., 110 E. 70th St., Cincinnati 16, Ohio
Fritzsche Brothers, Inc., 76 Ninth Ave., New York 11, N. Y.
• Fuller Co., H. B., 1150 Eustice St., St. Paul, Minn.

G

G and H Products Corp., 5718 52nd St., Kenosha, Wis.
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Gamse Litho Co., Pulaski Hiway & 66th, Baltimore 6, Md.
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Gardner Mfg. Co., 60 C. Kansas St., Horicon, Wis.
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Geigy Agricultural Chemicals, Saw Mill River Rd., Ardsley, N. Y.
General Box Co., 1825 Milner Co., Des Plaines, Ill.
General Capsule Co., 42 Watson St., Detroit, Mich.
General Corrugated Machinery Co., 141 W. Central Blvd., Palisades Park, N. J.
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General Nailing Machine Co., 1524 Smyrna Ave., Sanger, Calif.
General Packing Equipment Co., P. O. Box 19525, Houston 24, Tex.
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Girdler Process Equipment Div. Chemetron Corp., 224 East Broadway, Louisville 1, Ky.
Gisholt Machine Co., 1245 E. Washington Ave., Madison 10, Wis.
Glass Container Corp., 1747 W. Commonwealth Ave., Fullerton, Calif.
Glenshaw Glass Co., Glenshaw, Pa.
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Goodyear Tire and Rubber Co., 1144 E. Market St., Akron 16, Ohio
Gottscho Inc., Adolph, 6 Evans Terminal, Hillside 5, N. J.
Granite City Steel Co., 20th and Madison Ave., Granite City, Ill.
Gray Co., 60 E. 11th Ave. N.E., Minneapolis 13, Minn.
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Great Western Sugar Co., 1530 16th St., Denver, Colo.
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• Griffith Laboratories, Inc., 1415 West 37th St., Chicago 9, Ill.
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Gunther Products, Inc., 701 West 6th St., Galesburg, Ill.

H

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• Hamilton Kettles Div., Brighton Corp., 820 State Ave., Cincinnati 4, Ohio
Hanson Equipment Co., Beloit, Wis.
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• Hayssen Mfg. Co., 1305 St. Clair Ave., Sheboygan, Wis.
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• Heekin Can Co., 429 New St., Cincinnati 2, Ohio
Heil Co., The, 3000 W. Montana St., Milwaukee 1, Wis.
Hercules Powder Co., Huron Milling Div., Delaware Trust Bldg., Wilmington 99, Del.
Hinde and Dauch, Div., West Virginia Pulp and Paper, Sandusky, Ohio
Hoerner Boxes, Inc., 600 Morgan St., Keokuk, Iowa
• Hoffmann-LaRoche, Inc., Nutley 10, N. J.
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Holland Transplanter Co., 341 E. 7th, Holland, Mich.
Holly Sugar Corp., Colorado Springs, Colo.
Hood Industrial Gloves & Footwear, Division B. F. Goodrich Co., 36 Nichols St., Watertown 7, Mass.
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Howe Scale Co., Rutland, Vt.
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Hubinger Co., Keokuk, Ia.
• Hume Company, H. D., 812 N. Main St., Mendota, Ill.
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• Huntley Mfg. Co., P.O. Drawer 100, Brocton, N. Y.
Hutchinson and Co., D. W., 700 S. Columbus Ave., Mount Vernon, N. Y.
Hyster Co., 2902 N.E. Clackamas St., Portland 8, Ore.

I

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Independent Supply Co., 104 S. Washington St., Marion, Ind.
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Industrial Nucleonics Corp., 650 Ackerman Rd., Columbus 14, Ohio
Infilco, Inc., 901 S. Campbell Ave., Tucson, Ariz.
Inland Container Corp., 700 W. Morris, Indianapolis, Ind.
Inland Steel Co., 30 West Monroe St., Chicago 3, Ill.

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International Paper Corp., 220 East 42nd St., New York 17, N. Y.
• International Salt Co., Scranton 2, Pa.
International Staple and Machine Co., 806 E. Herrin St., Herrin, Ill.
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Island Equipment Corporation, P. O. Box 380276, Miami, Fla.

J

Jeffrey Mfg. Co., 978 N. Fourth St., Columbus, Ohio
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Jones Co., Inc., R. A., 315 E. 15th St., Covington, Ky.
Jones Corp., E. D., Pittsfield, Mass.
Jones & Laughlin Steel Corp., 3 Gateway Center, Pittsburgh 30, Pa.

K

KVP Sutherland Paper Co., Kalamazoo, Mich.
Kaiser Alum. & Chem. Corp., Alum. Can Div., 508 Kaiser Center, 16th St. Oakland, Calif.
Kaiser Steel Corp., 1924 Broadway, Oakland 12, Calif.
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Key Equipment Co., Milton-Freewater, Ore.
Keystone Lubricating Co., 21st & Clearfield Sts., Philadelphia 32, Pa.
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Knox Glass Inc., Knox, Pa.
Knox and Kinde Gelatin Co., Knox Bldg., Johnstown, N. J.
Koch Equipment Co., 2520 Holmes St., Kansas City 8, Mo.
Kohlenberger Engineering Corp., 1600 W. Commonwealth, Fullerton, Calif.
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• Krenz Incorporated, Oscar, Ashby at Sixth St., Berkeley 10, Calif.
Kromer Co., O. W., 1120 Emerson Ave., N., Minneapolis 11, Minn.

L

• L.E.E. Inc., 625 New York Avenue N.W., Washington 1, D. C.
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Lake State Yeast & Chemical Co., Div. of St. Regis Paper Co., Rhinelander, Wis.
• Langsenkamp Co., Inc., F. H., 229 East South St., Indianapolis 25, Ind.
La Porte Mat & Mfg. Co., La Porte, Ind.
• Latchford Glass Co., P. O. Box 71707, Los Angeles, Calif.
Lawrence Warehouse Co., 37 Drumm St., San Francisco 11, Calif.
Lee Metal Products Co., 432 Pine St., Philipsburg, Pa.
Leeds and Northrup Co., 4907 Stenton Ave., Philadelphia 44, Pa.
Leslie Salt Co., 505 Beach St., San Francisco 11, Calif.
• Lewis, G. B., Watertown, Wis.
Lift Trucks, Inc., 2425 Spring Grove, Cincinnati 14, Ohio
Lily-Tulip Cup Corp., 122 East 42nd St., New York 17, N. Y.
Link-Belt Co., Dept. 60-CPL, Prudential Plaza, Chicago 1, Ill.
Liquefreeze Co., Subsidiary of Isbrandtsen Co., 26 Broadway, New York 4, N. Y.
Logeman Co., C. W., 633 Bergen St., Brooklyn 38, N. Y.
• Longview Fibre Co., 111 Sutter St., San Francisco 4, Calif.
Love Co., J. E., Garfield, Wash.
Lubriplate Div., Fiske Bros. Refining Co., 129 Lockwood St., Newark 5, N.J.
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Lumenite Electronics Co., 407 South Dearborn St., Chicago, Ill.
Lunkenheimer Company, Beekman St. & Waverly Ave., Cincinnati 14, Ohio
Lustour Corp., 10 S. Brentwood Blvd., St. Louis 5, Mo.

M

MRM Co., 191 Berry St., Brooklyn, N .Y.
Macbeth Corp., P.O. Box 950, Newburgh, N. Y.
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Magline, Inc., Pinconning, Mich.
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Magnuson Engineers, Inc., 509 Emory St., San Jose 10, Calif.
Manpower Inc., 820 N. Plankinton Ave., Milwaukee 3, Wis.
Manton Gaulin Mfg. Co., 44 Garden St., Everett, Mass.
Manufacturers and Wholesalers Indemnity Exchange, 2019 Stout St., Denver 5, Colo.
• Marathon Corporation, Neenah, Wis.
Marine Colloids, Inc., 24 State St., New York 4, N. Y.
Markem Machine Company, 150 Congress Street, Keene, N. H.
Marsh Stencil Machine Co., Belleville, Ill.
Marvil Package Division, Atlas Plywood Corp., Hebron, Md.
Master Electric Co., 126 Davis Ave., Dayton 1, Ohio
Master Mechanics Co., 2097 Columbus Road, Cleveland 13, Ohio
Masterfreeze Corp., Sister Bay, Wis.
• Mathews Conveyor Co., Ellwood City, Pa.
Matthews & Co., Jas. H., 3925 Forbes St., Pittsburgh 13, Pa.
Maxwell Bros. Inc., 2300 S. Morgan St., Chicago 8, Ill.
Mayer and Sons Co., H. J., 6811 S. Ashland Ave., Chicago, Ill.
Mayfair Products Co., 1 South Read St., East Riverton, N. J.
McCormick & Co., Inc., McCormick Bldg., Baltimore, Md.
McGraw - Edison Co., Transportation Cooling Div., 5201 W. 56th St., Chicago 38, Ill.
950 West Marietta, NW Atlanta, Ga.
• McLauchlan Co., Inc., A. B., 1145 Lancaster Dr., Salem, Ore.
Mead Packaging, A Div. of Mead Corp.,
Merchants Refrigerating Co., 17 Varick St., New York 13, N. Y.
Merck and Co., Rahway, N. J.
Merrifield Trucking Co., P.O. Box 3350, Anaheim, Calif.
Metal-Glass Products Co., 555 E. Walnut St., Pasadena, Calif.
• Metro Glass Division, National Dairy Products Corporation, 107 West Side Avenue, Jersey City 5, N. J.
Michael-Leonard Co., P. O. Box 987, Davenport, Ia.
Michigan Lithographing Co., 1 Carlton Ave., S. E., Grand Rapids, Mich.
Miles Chemical Co., Div. of Miles Laboratories, Inc., 1127 Myrtle St., Elkhart, Ind.
Miller Chemical & Fertilizer Corp., 3006 W. Cold Spring Lane, Baltimore 15, Md.
Milprint, Inc., 4200 N. Holton Ave., Milwaukee, Wis.
Milwaukee Motive Mfg. Co., 1825 S. Kinnickinninc Ave., Milwaukee 4, Wis.
Minneapolis - Honeywell Regulator, Brown Instrument Div., Wayne & Windrim Ave., Philadelphia 44, Pa.
Minnesota Mining and Mfg. Co., 900 Bush Ave., St. Paul, Minn.
Miranol Chemical Co., 277 Coit St., Irvington 11, N. J.
Mixing Equipment Co., Inc., 135 Mt. Read Blvd., Rochester, N. Y.
Mojonnier Bros. Co., 4601 W. Ohio St., Chicago 44, Ill.
Mono-Sol Corp., 407 County Line Road, Gary, Ind.
Monsanto Chemical Co., 800 N. Lindburgh Blvd., St. Louis 1, Mo.
Morningstar-Paisley Products, Inc., 630 W. 51st St., New York 19, N. Y.
Morrison Bros. Seed Co., Dishman Branch, P.O. Box 66, Spokane 63, Wash.
Morse Chain Co., Ithaca, N. Y.
• Morton Salt Co., Industrial Div., 110 N. Wacker Dr., Chicago, Ill.
Moto-Truc Co., 1988 E. 59th St., Cleveland 3, Ohio
• Muirson Label Company, Inc., 435 Stockton St., San Jose, Calif.
Mutual Citrus Products, 424 S. Atcheson, Anaheim, Calif.
Myers & Bro. Co., F.E., Orange and Fourth St., Ashland, Ohio

N

Nashua Corp., 44 Franklin St., Nashua, N. H.
• National Can Corp., 3217 W. 47th St., Chicago 32, Ill.
National Equipment Corp., 153 - 157 Crosby St., New York 12, N. Y.
National Five-Point, Inc., 305 W. Romneya Dr., P. O. Box 686, Anaheim, Calif.
• National Starch and Chemical Corp., 750 Third Ave., New York 17, N. Y.
National Steel Corp., Grant Bldg., Pittsburgh 19, Pa.
National Sugar Refining Co., 100 Wall St., New York 5, N. Y.
Nationwide Leasing Company, 11 S. LaSalle St., Chicago 3, Ill.
New Jersey Machine Corp., 16th & Clinton Ave., Hoboken, N. J.

1. Weight of batch ingredient.
2. Test of homogeneity of batch.
3. Optical check of furnace temperatures.
4. Analysis of exhaust gases.
5. Determination of viscosity of glass.
6. Test for specific gravity.
7. Electronic inspection.*
8. Visual inspection.
9. Polariscope evaluation.
10. Comparitor check of dimensions.
11. Dimensional check by gauges.
12. Weight check.
13. Capacity check.
14. Hydrostatic pressure tests.
15. Thermal shock tests.
16. Wall thickness determination.

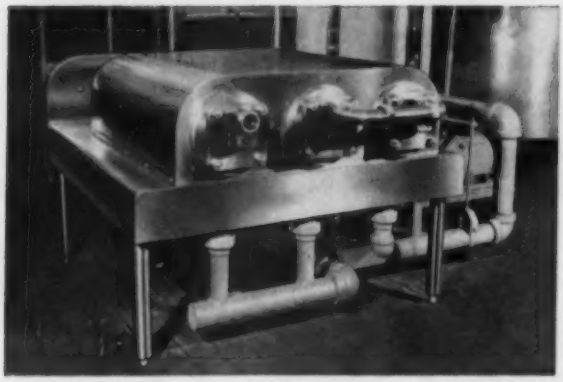
before Tygart Valley glass containers reach your filling lines. Because Quality and Uniformity are emphasized at Tygart Valley

All the eye appeal of your product shows. And, Tygart Valley Quality Glass containers mean uninterrupted service on modern filling lines.

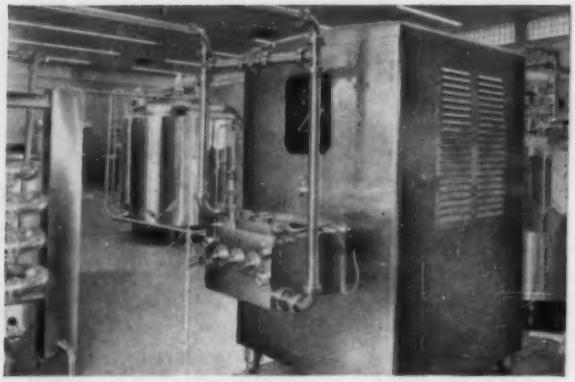
*Certain finishes and sizes

BROCKWAY GLASS
COMPANY, INC., Brockway, Pennsylvania
Sales Offices in Principal Cities
Subsidiary: Tygart Valley Glass Company, Washington, Pa.

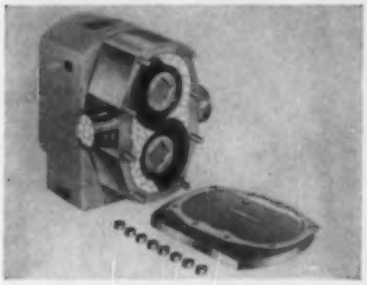
SEVEN Creamery Package Products Job-Proved for More Profitable Processing



SWEPT-SURFACE® HEATER and COOLER provides extremely economical continuous heating and cooling of liquids and semi-solids; — 30° F. to 300° F. Blades constantly sweeping product from heat transfer surface eliminate burn-on during heating, increase product yield. Ideal for heavy bodied products and pastes. Bulletin E-1300.

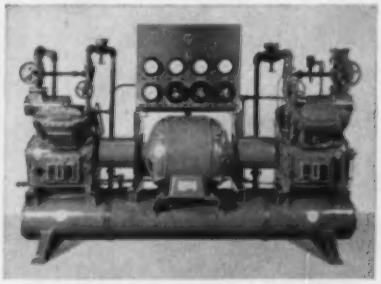


HIGH EFFICIENCY HOMOGENIZERS—Completely redesigned for smoother, more efficient homogenization at much lower pressure than others. Reduces power costs and parts wear. Single service valve gives "new" performance every day. Complete line, including high capacity 5-cyl. models. Bulletin N-1292.



STAINLESS ROTARY FOOD PUMP
New single-lobe, resilient rotors are especially designed for pumping food products having distinct food particles up to ¾" size, such as vegetable stews and mixes, fruits in simple syrups, cottage cheese, etc. Flow is continuous, positive, non-agitating. Supplement 3, Bulletin H-1290.

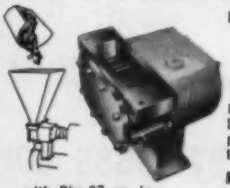
CENTRIFUGAL SANITARY PUMPS
Stainless steel. Complete size and capacity range matches pump to job—saves money and operating cost. Built to reduce maintenance. Fast cleaning and quick disassembly without tools. Pumps both product and cleaning solutions. Bulletin H-1200.



2-STAGE AMMONIA COMPRESSOR UNITS
Provide automatic day-and-night low temperature refrigeration for hardening rooms, frozen products, etc. Use 25% to 50% less connected horsepower than for single stage, save wear and operating problems. Package design saves space. Two types and capacity ranges. Shown, Type "K." Bulletin V-1211.

CRESCENT PLATE HEAT EXCHANGERS
Stainless steel. Can be continuous heater, cooler, regenerator, H.T.S.T. pasteurizer — or all four. Reduce gasket maintenance to less than half, yet every plate is a heat exchanger. Compact design saves space, easy cleaning saves wash-up time. Meet U.S.P.H. standards. Bulletin E-1153.

TOP FEED STAINLESS ROTARY FOOD PUMPS



with Big 27 sq. in. inlet for hopper feed

Resilient rotors
5-lobe for viscous products
Single lobe for particles

Up to 50,000 lbs./hr. at 100 psi. Temperatures to 220°F.

Bulletin A-1-525

with Standard inlet up to 3" diameter

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CREAMERY PACKAGE MFG. CO. OF CANADA, LTD.
267 King Street, West • Toronto 2B, Ontario

New York Terminal Warehouse Co., 25 S. William St., New York 4, N. Y.
• Niagara Blower Co., 405 Lexington Ave., New York 17, N. Y.
Niagara Filter, Div. American Machine & Metal Inc., 544-12th Ave., East Moline, Ill.
North American Car Corp., 231 S. LaSalle St., Chicago 4, Ill.
Northrup King & Co., 1500 N. E. Jackson, Minneapolis 13, Minn.
Northwestern Glass Co., 5801 E. Marginal Way, Seattle, Wash.
Nu-Lite Corp., 41 South Sixth St., Newark, N. J.
NuWay Harvester Co., 1240 N. 13th St., San Jose 10, Calif.

O

• Oakite Products, Inc., 44 F Rector St., New York 6, N. Y.
Ohio Chemical & Surgical Equip. Co., Inc., Air Reduction Div., Custom Service Lab., 1400 E. Washington Ave., Madison 10, Wis.
Ohio Fruit Products Co., Inc., P.O. Box 472, North East, Pa.
Old Dominion Box Co., Inc., P.O. Box 660, Charlotte, N. C.
Olin-Mathieson Chem. Corp., 460 Park Ave., New York 22, N. Y.
The Oliver Corp., 400 West Madison, Chicago 6, Ill.
Oliver Machinery Co., 445 6th St., N.W. Grand Rapids 2, Mich.
Olney Inc., Geo. J., Westernville, N. Y.
Orr & Sembower, Inc., P. O. Box 1138, Reading, Pa.
• Owens-Illinois Glass Co., Food Processors Div., 14th & Adams, Toledo 1, Ohio

P

Pacific Coast Foil Co., 177 S. Airport Blvd., South San Francisco, Calif.
Pacific Intermountain Express, 14th and Clay, P. O. Box 958, Oakland, Calif.
Pacific Wire Works, Co., 4515 6th Ave., S. Seattle 8, Wash.
Package Machinery Co., East Longmeadow, Mass.
Packaging Corporation of America, Rittman, Ohio
Pak-Rapid, Inc., Elizabeth St., West Conshohocken, Pa.
Palmer-Shile Co., 16045 Fullerton Ave., Detroit 27, Mich.
Palmer Co., Harold L., 28625 Grand River Ave., Farmington, Mich.
Palmer Thermometers Inc., 2515 Norwood Ave., Cincinnati 12, Ohio
Paperlynen Co., 555 West Goodale St., P. O. Box 1498, Columbus, Ohio
Paulson Bros. Industries, Inc., Clear Lake, Wis.
Pease Co., F. B., 1450 E. Henrietta Rd., Rochester 18, N. Y.
Peco Corporation, 111 Ortega Ave., Mt. View, Calif.
Penick & Co., S. B., 100 Church St., New York 8, N. Y.
Penick & Ford Ltd., Inc., 750 Third Ave., New York 17, N. Y.
• Pennsalt Chemicals Corp., 2901 Taylor Way, Tacoma 2, Wash.
Pennsylvania Scale Co., Graybill Rd., Bareville, Pa.
Pepsi-Cola Co., 3 W. 57th St., New York 19, N. Y.
Peterson & Peterson, 2705 Tenth Street, Berkeley 10, Calif.
• Peto Seed Company, P. O. Box 138, Saticoy, Calif.
Pfaudler-Permutit, Inc., Pfaudler Div., 1000 West Ave., Rochester 3, N. Y.
• Pfizer & Co., Chas., 630 Flushing Ave., Brooklyn 6, N. Y.
Phelps Dodge Refining Corporation, 300 Park Avenue, New York, N. Y.
Phoenix Metal Cap Co., 2444 W. 16th St., Chicago 8, Ill.
Pick Manufacturing Co., Water Heating Div., West Bend, Wis.
Piedmont Label Co., Bedford, Va.
Pierce Glass Co., Port Allegany, Pa.
Pioneer Rubber Co., Willard, Ohio
Plastomatic Corp., King and Bridge Sts., Malvern, Pa.
Pneumatic Scale Corp., North Quincy, Mass.
Pollock Paper Company, 2236 Cockrell St., Pittsburgh Corning Corp., 1 Gateway Center, Pittsburgh, Pa.
Polymer Industries, Inc., Springdale, Conn.
• Porter-Way Harvester Mfg. Co., Waterloo, N. Y.
Potdevin Machine Co., Teterboro, N. J.
Powell Company, The William, 2525 Spring Grove Ave., Cincinnati 22, Ohio
Powers Regulator Co., 3400 Oakton St., Skokie 70, Ill.
Precision Scientific Co., 3737 W. Cortland St., Chicago 47, Ill.
Proctor & Schwartz, Inc., 7th and Tabor Rd., Philadelphia, Pa.
Productive Equipment Corp., 2926 W. Lake St., Chicago 12, Ill.
Protection Products Mfg. Co., 2305 Superior St., Kalamazoo, Mich.
Puccinelli Packing Company, 350 Third St., Turlock, Calif.
Pullman-Standard Car Mfg. Co., 200 S. Michigan Ave., Chicago 4, Ill.
Pure Line Seeds, Inc., P.O. Box 91, Moscow, Ida.

Q

Quincy Market Cold Storage and Warehouse Co., 178 Atlantic Ave., Boston, Mass.
Quaker Oats Co., Industrial Foods Sales Dept. 345 Merchandise Mart, Chicago 54, Ill.
Quality Lithographing Division, Riegel Paper Corporation, 260 Madison Avenue, New York 16, N. Y.

R

Radio Corp. of America, Industrial Products, Camden, N. J.
Rapids-Standard Co., 144 Trowbridge St., N. W., Grand Rapids, Mich.
Redington Co., F. B., 3010 St., Charles Road, Bellwood, Ill.
Reeves Pulley Co. Div., Reliance Electric and Engineering Co., Columbus, Ind.
• Refined Syrups and Sugars, Inc., Yonkers, N. Y.
Refrigeration Appliances, Inc., 901 W. Lake St., Chicago, Ill.
Reliance Elec. & Engr. Co., 1525 Adrian Road, Burlingame, Calif.
Reid Boiler Works, South Bellingham, Wash.
Republic Steel Corp., 3100 E. 45th St., Cleveland 1, Ohio
Rescor Industries, 6 West Prospect Ave., Mount Vernon, N. Y.
Resina Automatic Machry. Co., 572 Smith St., Brooklyn 31, N. Y.
Reynaud, Ltd., 900-910 21st Street, Union City, N. J.
Reynolds Metals Co., 6601 W. Broad St., Richmond 18, Va.
Rheem Mfg. Co., 1701 W. Edgar Rd., Linden, N. J.
Rhodia, Inc., 60 E. 56th St., New York 22, N. Y.
• Rice Seed Co., W. A., 1108 W. Carpenter St., Jerseyville, Ill.
Richardson Scale Co., 668 Van Houten Ave., Clifton, N. J.
Richfield Oil Corp., Richfield Bldg., Los Angeles 17, Calif.
Richter Sons Co., A.M., 710 Madison St., Manitowoc, Wis.
• Rietz Mfg. Co., Santa Rosa, Calif.
Ringsby Truck Lines Inc., Refrigerated Div., 1420 33rd St., Denver 5, Colo.
Robbins & Myers, Inc., 1345 Lagonda Ave., Springfield, Ohio
• Robins and Co., Inc., A. K., 713 East Lombard St., Baltimore 2, Md.
Robinson & Sons, Lawrence, P. O. Box 1373, Modesto, Calif.
Rochester Lithographic Mfg. Co., 95 Mt. Read, Rochester, N. Y.
Roesch Co., Louis, 1886 Mission St., San Francisco, Calif.
Rogers Brothers Company, P. O. Box 2188, Idaho Falls, Ida.
Rohm & Haas Co., 222 W. Washington Sq. Philadelphia 5, Pa.
Rossotti Lithograph Corp., 8511 Tonnelle Ave., North Bergen, N. J.
Rust-Oleum Mfg. Co., 2425 Oakton St., Evanston, Ill.

S

St. Louis Terminal Field Warehouse Co., 826 Clark, St. Louis, Mo.
• Sandvik Steel, Inc., Belt Conveyor Div., 1702 Nevins Road, Fairlawn, N. J.
Sanfax Co., P.O. Box 604, Atlanta, Ga.
Santa Fe Railway Co., 80 E. Jackson Blvd., Chicago 4, Ill.
Scandia Packaging Machinery Co., 500 Belleville, North Arlington, N. J.
Schjeldahl Co., 206 S. Division St., Northfield, Minn.
Schmidt Litho Co., 2nd and Bryant Sts., San Francisco, Calif.
Schroeder Machine Corp., New Court Ave., East Syracuse, N. Y.
Scientific Instrument Co., 617 Howard St., Detroit, Mich.
Scientific Oil Compounding Co., Inc., Cunilate Div., 1637 S. Kilbourn Ave.,
• Scott Viner Co., 1224 Kinnear Rd., Columbus, Ohio
Sealube Co., 20 Valley St., Wakefield, Mass.
Security Lithograph Co., Label Div., 200 Broadway, San Francisco, Calif.
• Seed Research Specialists, P.O. Box 3091, Modesto, Calif.
Sefton Fibre Can Co., Div., Container Corp. of America, 3275 Big Bend Blvd., St. Louis 17, Mo.
Sellers Injector Corp., 1600 Hamilton St., Philadelphia 30, Pa.
Shell Chemical Co., Agricultural Chem. Div., 110 West 51st, New York 20, N. Y.
Shubert Co., H. A., 1212 Washington St., Wilmette, Ill.
Shuttleworth Inc., Warren, Ind. Ind.
Signode Steel Strapping Co., 2600 N. Western Ave., Chicago 47, Ill.
• Simplicity Engineering Co., Durand, Mich.
Simpson Engineered Wood Products Co., 2301 N. Columbia Blvd., Portland, Ore.

Equipment/Supplies Index

Sinclair-Scott Co., 6245 State Rd., Philadelphia, Pa.
Smith Corp., A. O., Kankakee, Ill.
• Smith's Sons Co., John E., 50 Broadway, Buffalo, N. Y.
Sohio Chemical Co., Lima, Ohio
Solbern Mfg. Corp., P. O. Box 567, Caldwell, N. J.
Somerville Dressed Meat Co., 128 Newmarket Sq., Boston 18, Mass.
Southwestern Engineering Co., 4800 Santa Fe Ave., Los Angeles 58, Calif.
• Speas Co., 2400 Nicholson Ave., Kansas City 20, Mo.
Spencer Chemical Co., Dwight Bldg., Kansas City 5, Mo.
Spotnails, Inc., 1527 Lyons St., Evanston, Ill.
• Spraying Systems Co., 3201 Randolph, Bellwood, Ill.
Spreckels Sugar Company, 2 Pine St., San Francisco 11, Calif.
Sprout Waldron Co., Muney, Penna.
Staley Mfg. Co., A. E., Decatur, Ill.
Standard Agricultural Chemicals, Inc., 1301 Jefferson St., Hoboken, N. J.
Standard Conveyor Co., 315 N. W. Second Ave., North St. Paul 9, Minn.
• Standard Machine Co., Canton, Mo.
• Standard Oil Co. of Calif., Western Operations Inc., 225 Bush St., San Francisco 20, Calif.
Standard Packaging Corp., 200 East 42nd St., New York 17, N. Y.
Standardized Products Co., P.O. Box 115, Santa Ana, Calif.
• Stange Company, Wm. J., 342 Northwestern Ave., Chicago 12, Ill.
Stauffer Chemical Co., 380 Madison Ave., New York 17, N. Y.
Stecher-Traung Litho Corp., 274 No. Goodman St., Rochester 7, N. Y.
Steinen Mfg. Co., Wm., 45 Bruen St., Newark 5, N. J.
Stephens-Adamson Mfg. Co., Aurora, Ill.
Sterling Electric Motors, Inc., 5401 Telegraph Rd., Los Angeles, Calif.
Stern Can Co., 71 Locust, Boston, Mass.
Sterwin Chemicals, Inc., 1450 Broadway, New York 17, N. Y.
Stewart-Warner Corp., 1825 W. Diversey Parkway, Chicago, Ill.
Stokes Corp., F. J., 5500 Tabor Rd., Philadelphia 20, Pa.
Stone Container Corp., 4200 W. 42nd St., Chicago, Ill.
Strawberry Hill Press, Inc., 23-02 49th Ave., Long Island City 1, N. Y.
Sturtevant Mill Co., 105 Clayton St., Dorchester, Boston 22, Mass.
Sugarine, Inc., Mt. Vernon, Ill.
• Sunkist Growers Products Sales Dept., 720 E. Sunkist St., Ontario, Calif.
Superior Separator Co., Fluidizer Div., 121 Washington Ave., S., Hopkins, Minn.
Sweet Corn Research Inc., 114 Kellogg, Ames, Ia.
• Swift & Co., 4115 Packers Ave., Chicago 9, Ill.
Syntron Co., 1232 Lexington Ave., Homer City, Pa.

T

Takamine Laboratories Div., Miles Laboratories, Inc., Elkhart, Ind.
Taylor Instrument Companies, 95 Ames St., Rochester 1, N. Y.
Terminal Ice and Cold Storage Co., 514 Pittock Block, 921 S.W. Washington St., Portland 5, Ore.
Terriss-Consolidated Industries, 22 Wooster St., New York 13, N. Y.
Thatcher Glass Mfg. Co., Inc., 375 Park Ave., New York 22, N. Y.
Thermoid Div., H. K. Porter Co., Inc., 200 Whitehead Rd., Trenton, N. J.
• Thermovac Processing Equipment Div., Rheem Mfg. Co., 816 E. Hazelton Ave., Stockton, Calif.
Toledo Scale Corp., 1055 Telegraph Rd., Toledo 12, Ohio
• Ton-Tex Corp., 247 Pear St. N. W., Grand Rapids 2, Mich.
Tote System Inc., Beatrice, Neb.
Towmotor Corporation, 1226 E. 152nd St., Cleveland 10, Ohio
• Trans-American Refrigerated Svc. Ltd., P.O. Box 1275, Colorado Springs, Colo.
Tranter Mfg. Co., Inc., Kold-Hold Div., 735 Hazel St., Lansing 4, Mich.
Triangle Package Machine Co., 6633 W. Diversey Ave., Chicago 35, Ill.
Tri-Counties Advertising, Inc., 826 Main St., Ventura, Calif.
Tropical Paint Company, 1240 W. 70th St., Cleveland 2, Ohio
Trucson Laboratories, 1700 Caniff, Detroit, Mich.
Tube Turns Plastics, Inc., 2929 Magazine St., Louisville 11, Ky.

U

Union Bag—Camp Paper Corp., 233 Broadway, New York 7, N. Y.
Union Carbide Chemical Co., Agricultural Chemicals Dept., 270 Park Ave., New York 17, N. Y.
Union Paste Co., 1605 Hyde Park Ave., Boston 36, Mass.
Union Standard Equipment Co., 318 Lafayette St., New York 12, N. Y.
• Union Starch and Refining Co., Third and Washington Sts., Columbus, Ind.
Union Sugar Div., Consolidated Foods Corp., 230 California St., San Francisco 11, Calif.
United Co., The, Tuc Road, Westminster, Md.
United Can Div., Hunt Foods Industries, Inc., P. O. Box 3457, Hayward, Calif.
United Cork Companies, 2 Central Ave., Kearny, N. J.
United Shoe Machinery Co., 140 Federal, Boston 7, Mass.
U.S. Bottlers Machinery Co., 4015 N. Rockwell St., Chicago 18, Ill.
U.S. Electrical Motors, 200 E. Slauson Ave., Los Angeles 11, Calif.
U.S. Printing and Litho. Co., Robertson Ave. and Beech, Cincinnati, Ohio
U.S. Rubber Co., 1230 Avenue of the Americas, New York 20, N. Y.
U.S. Rubber Co., Naugatuck Chem. Div., Elm St., Naugatuck, Conn.
U.S. Steel Corp., 525 William Penn Pl., Pittsburgh 30, Pa.
U.S. Stoneware Co., Plastics & Synthetics Div., Brimfield Rd., Akron 9, Ohio
Universal Underwriters, Union National Bank Bldg., Kansas City, Mo.
• Urschel Laboratories, Inc., 2503 Calumet Rd., Valparaiso, Ind.
Utah-Idaho Sugar Co., Beneficial Life Bldg., Salt Lake City 10, Utah

V

Veeder Root Co., 70 Sargeant St., Hartford 2, Conn.
Veg-A-Peel Co., Inc., 215-219 N. Walnut St., Creston, Ia.
Vico Products Co., 417 W. Scott St., Chicago 10, Ill.
Viking Pump Co., Fourth and Alter Sts., Cedar Falls 1, Ia.
Vilter Mfg. Co., 2217 S. First St., Milwaukee 7, Wis.
Visking Co., Div., of Union Carbide Corp., 6733 W. 65th St., Chicago 38, Ill.
Von Opel Corp., Georg, 15 Williams St., New York, N. Y.
Voss Belting and Specialty Co., 5645 N. Ravenswood Ave., Chicago, Ill.

W

Wallace and Tiernan, Inc., 25 Main St., Belleville 9, N. J.
• Warner, Inc., Lansing B., The Canners Exchange, 4210 Peterson Ave., Chicago 30, Ill.
Warner-Jenkinson Mfg. Co., 2526 Baldwin St., St. Louis 6, Mo.
Warrick Co., Charles F., 1964 West 11 Mile Rd., Berkeley, Mich.
Washburn Wilson Seed Co., Moscow, Ida.
• Waukesha Foundry Co., Pump Div., 1326 Lincoln Ave., Waukesha, Wis.
Weber Co., Inc., H. G., Kiel, Wis.
Weigh Right Automatic Scale Co., Mills Rd., Joliet, Ill.
WEMCO, Div., Western Machy. Co., 650 Fifth St., San Francisco 7, Calif.
West Virginia Pulp & Paper Co., 230 Park Ave., New York, N. Y.
Western Can Co., 1849-17th St., San Francisco 3, Calif.
Western Condensing Co., P. O. Box 739, 340 W. College Ave., Appleton, Wis.
Western Gear Corp., Belmont, Calif.
Western Litho. Co., 600 E. 2nd St., Los Angeles 54, Calif.
Westinghouse Electric Co., P. O. Box 2278, 3 Gateway Center, Pittsburgh 30, Pa.
Weyerhaeuser Co., Boxboard & Folding Carton Div., 919 N. Michigan Ave., Chicago 11, Ill.
Wheeling Steel Corp., Wheeling, W. Va.
White Cap Co., Div. of Continental Can Co. Inc., 1819 N. Major Ave., Chicago, Ill.
Wilkens-Anderson Co., 4525 W. Division St., Chicago, Ill.
Wilmot Castle Co., P. O. Box 629, Rochester, N. Y.
• Wilson Rubber Co., Div. of Becton, Dickinson & Co., 1200 Garfield Ave., S.W., Canton 6, Ohio
• Wisconsin Alumni Research Foundation, P. O. Box 2217, Madison 1, Wis.
Wisconsin Cold Storage Co., 344 E. Florida St., Milwaukee, Wis.
Woodman Co., Inc., 647 East College Ave., Decatur, Ga.
Woolson Spice Co., Summit and Sandusky Sts., Toledo, Ohio
Wyandotte Chemicals Corp., J. B. Ford Div., Wyandotte, Mich.

Y

Yale & Towne Mfg. Co., Automatic Transportation Div., 101 W. 87th St., Chicago 20, Ill.
Yeomans Bros. Co., 1999 N. Ruby St., Melrose Park, Ill.
York Corp., Roosevelt & Pennsylvania, York, Pa.
York Div., Borg-Warner Corp., Grantley Rd., York, Pa.
Youngstown Sheet and Tube Co., Youngstown 1, Ohio

Z

• Zeiss, Inc., Carl, 485 Fifth Ave., New York 17, N. Y.

Classified Listing of Suppliers

How To Use It

1. The **name** of the manufacturer is given under the product listing.
2. The **address** of the manufacturer is given in the alphabetical listing, which begins on page 42.

Where to Look

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Preparation and Processing Equipment

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Food Ingredients and Additives

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Raw Product Equipment and Supplies

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Maintenance, Lubrication, Sanitation Equipment and Supplies

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Handling, Conveying and Power Equipment

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Packaging Equipment Containers and Supplies

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Control and Laboratory Equipment, Instruments, Supplies.

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Special Services

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Contract packers of food in aerosol cans.

SECTION A
Preparation and Processing Equipment

Agitators, mixers, stirrers, blenders

Alsop Engineering Corp.
Atlas-Pacific Engineering Co.
Bauer Bros. Co.
Benner-Nawman, Inc.
Chemicolloid Labs.
Cherry-Burrell Corp.
Chisholm-Ryder Co., Inc.
Christian Engineers, J. D.
Cog Corp.
Colton Co., Arthur
Creamery Package Mfg. Co.
Day Co. Div., J. H.; Cleveland Automatic Machine Co.
Dunkley Co.
Fernholtz Machinery Co.
Girdler Process Equipment Div. Chemetron Corp.
Groen Mfg. Co.
Hanson Equipment Co.
Krenz Inc., Oscar
Lee Metal Products Co.
Metal-Glass Products Co.
Mixing Equipment Co.
Pfaudler Permutit, Inc.
Stokes Corp., F. J.
Sturtevant Mill Co.
Rietz Mfg. Co.
Terriss-Consolidated Industries
Thermovac Inc.
Union Standard Equipment Co.
United Co., The

Blanchers, pre-heaters, steamers

American Machinery Corp.
Atlas-Pacific Engineering Co.
Benner-Nawman, Inc.
Berlin Chapman Co.
Central Steel and Tank Co.
Chisholm-Ryder Co., Inc.
Christian Engineers, J. D.
Cuyler Corp., Otto W.
Dunkley Co.
Food Machinery and Chem. Corp.
Fostoria Corp.
Huntley Mfg. Co.
Krenz Inc., Oscar
Metal-Glass Products Co.
Pease Co., F. B.
Robins and Co., Inc., A. K.
Scott Viner Co.
Thermovac Inc.

Breading equipment

Bridge Machine Co.
Metal-Glass Products Co.
Robins and Co., Inc., A. K.
Union Standard Equipment Co.

Briners, brine makers, salters

Biner Ellison Machinery Co.
Food Machinery and Chem. Corp.
Horix Manufacturing Co.
International Salt Co.
Leslie Salt Co., Scientific Salting Div.
Morton Salt Co., Industrial Div.

Can openers, can crushers

American Can Co., Canco Div.
Dazey Corp., The
Edlund Co.
Langsenkamp Co., F. H.
Rescor Industries

Choppers, crushers, disintegrators

Benner-Nawman, Inc.
Berlin Chapman Co.
Chisholm-Ryder Co., Inc.
Cuyler Corp., Otto W.
Dazey Corp., The
Food Machinery & Chem. Corp.
Koch Equipment Co.
Langsenkamp Co., F. H.
Rietz Mfg. Co.
United Co., The

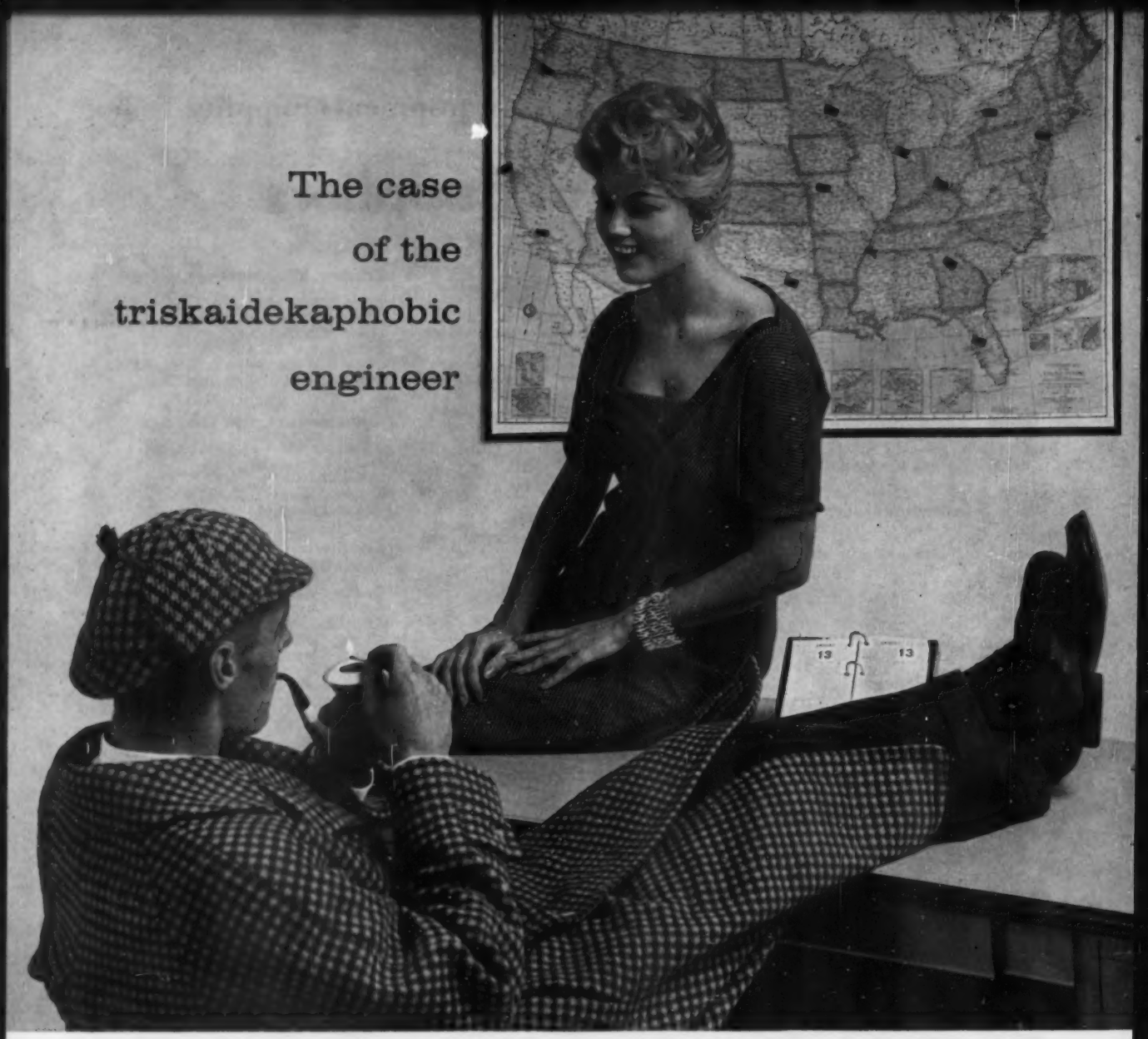
Cleaners—raw product

American Machinery Corp.
Chisholm-Ryder Co., Inc.
Commercial Mfg. and Supply Co.
Ferrell and Co., A. T.
Food Machinery and Chem. Corp.
Huntley Mfg. Co.
Key Equipment Co.
McLauchlan Co., Inc.
Rice Seed Co., W. A.
Scott Viner Co.
Sinclair-Scott
United Co., The

Cookers, coolers, pasteurizers

American Machinery Corp.
Barry-Wehmiller Machy. Co.
Berlin Chapman Co.
Brewers & Bottlers Equipment Corp.
Bridge Machine Co.
Chemicolloid Labs.
Cherry-Burrell Corp.
Chicago Stainless Equipment Corp.
Chisholm-Ryder Co., Inc.
Christian Engineers, J. D.
Creamery Package Mfg. Co.
Cuyler Corp., Otto W.
Dundon Iron Works
Dunkley Co.
Food Machinery and Chem. Corp.
Fostoria Corp.
Fouche, Maison Frederic
General Food Equipment Co.
Girdler Process Equipment Div. Chemetron Corp.
Horix Manufacturing Co.
Huntley Mfg. Co.
Krenz Inc., Oscar
Langsenkamp Co., F. H.
Lee Metal Products Co.
Metal-Glass Products Co.
Palmer Co., Harold L.
Pease Co., F. B.

The case of the triskaidekaphobic engineer



FEARLESS FULLER: I finished off a very interesting case over the weekend, Miss Watson.

MISS WATSON: Let's hear about it, Fearless.

FEARLESS FULLER: It concerns a good prospect who agreed our adhesives were best, our service was best and our price was best. Yet he wouldn't order.

MISS WATSON: A baffling mystery.

FEARLESS FULLER: Yes, until I discovered the reason for his actions. The man suffers from triskaidekaphobia.

MISS WATSON: Sounds like a horrible disease.

FEARLESS FULLER: Not in the least. Actually all it means is fear of the number 13. Many people are triskaidekaphobics.

MISS WATSON: That must be what my hillbilly cousin was. He refused to sleep 13 in a bed. But what has triskaidekaphobia got to do with us?

FEARLESS FULLER: Well, this engineer's been reading our ads and noted that we always list 13 Fuller Plants. And for this reason he refused to order from us.

MISS WATSON: How did you solve the case?

FEARLESS FULLER: I explained that although we list 13 plants, these are only our main plants. Actually, Fuller has additional locations, 23 to be exact.

MISS WATSON: Well, did you sign him up for a big order?

FEARLESS FULLER: Naturally.

MISS WATSON: Oh, you're wonderful, Fearless!

FEARLESS FULLER: Elementary, Miss Watson. There are very few problems a Fuller man can't solve.

Your Fuller man is ready with the correct solutions on any adhesive problems for you, too. Contact your near by plant.

H. B. Fuller Co.

INDUSTRIAL ADHESIVES

St. Paul, Minnesota

St. Paul, Minn. • Atlanta, Ga. • Buffalo, N.Y. • Chicago, Ill. • Cincinnati, Ohio
Dallas, Tex. • Kansas City, Mo. • Linden, N.J. • Los Angeles, Calif. • Memphis, Tenn. • Portland, Ore. • So. San Francisco, Calif. • Tampa, Fla.
Also Winnipeg, Can. • Fuller Adhesives International, Nassau, Bahamas

Equipment / Supplies Index

Rietz Mfg. Co.
Union Standard Equipment Co.
York Div., Borg-Warner Corp.

Corers, peelers, stemmers, pitters, snippers

Ashlock Co., Geo. W.
Atlas-Pacific Engineering Co.
Boutell Mfg. Co.
Canners Supply, The
Chisholm-Ryder Co., Inc.
Cuyler Corp., Otto W.
Dunkley Co.
Elliott Mfg. Co.
Filper Corp.
Food Machinery and Chem. Corp.
Huntley Mfg. Co.
Langsenkamp Co., F. H.
Magnuson Engineers, Inc.
Milwaukee Motive Mfg. Co.
Pease Co., F. B.
Robins and Co., Inc., A. K.
Toledo Scale Co.

Cutters, dicers, slicers

Ashlock Co., Geo. W.
Atlas-Pacific Engineering Co.
Chisholm-Ryder Co., Inc.
Cuyler Corp., Otto W.
Dazey Corp., The
Food Machinery and Chem. Corp.
Koch Equipment Co.
McLauchlan Co., Inc., A. B.
Olney Inc., George J.
Pease Co., F. B.
Robins and Co., Inc., A. K.
Scott Viner Co.
Sinclair-Scott
Smith's Sons Co.
United Co., The
Urschel Laboratories, Inc.

Deaerators, aerators

American Machinery Corp.
Chain Belt Co.
Cherry-Burrell Corp.
Chisholm-Ryder Co., Inc.
Food Machinery and Chem. Corp.
Thermovac Inc.

Dispensers — brine, salt, sugar, syrup, etc.

Fernholtz Machinery Co.
Food Machinery and Chem. Corp.
Hamachek Machine Co., Frank
Hardy Salt Co.
Leslie Salt Co.
Logeman Co., C. W.
Magnuson Engineers, Inc.
Morton Salt Co., Industrial Div.

Dryers, dehydraters, evaporators, vacuum pans

Allen Fruit Co., Inc.
Benner-Nawman, Inc.
Bowen Engineering Co.
Buflovak Equipment Division, Blow-Knox Company
Carrier Corp.
Carver, Inc., Fred S.
Chisholm-Ryder Co., Inc.
Christian Engineers, J. D.
Diamond Mfg. Co.
Fernholtz Machinery Co.
Fostoria Corp.
Groen Mfg. Co.
Heil Co., The
Krenz Inc., Oscar
Lee Metal Products Co.
Link-Belt Co.
Metal-Glass Products Co.
Mojonnier Bros. Co.
Niagara Blower Co.
Pfaudler Co.
Rietz Mfg. Co.
Thermovac Inc.
Veg-A-Peel Co., Inc.

Egg Handling Equipment

Food Systems, Inc.
Peterson & Peterson
Western Gear Corp.

Exhausters

American Machinery Corp.
Barry-Wehmiller Machinery Co.
Berlin Chapman Co.
Christian Engineers, J. D.
Dunkley Co.
Food Machinery and Chem. Corp.
Horix Mfg. Co.
Robins and Co., Inc., A. K.
Standard Metal Products

Extractors—juice, pulp

Bauer Bros. Co.
Berlin Chapman Co.
Brown Citrus Machinery Corp.
Carver Inc., Fred S.
Chisholm-Ryder Co., Inc.
Cuyler Corp., Otto W.
Food Machinery and Chem. Corp.
Langsenkamp Co., F. H.

Filling machines, can, carton, glass

Allen Fruit Co., Inc.
Anderson Bros Mfg. Co.
Atlas-Pacific Engineering Co.
Biner-Ellison Machinery Co.
Brewers & Bottlers Equipment Corp.
Bridge Machine Co.
Burt Co., F. L.
Cherry-Burrell Corp.
Chisholm-Ryder Co., Inc. of Pennsylvania
Colton Co., Arthur
Container Corp. of America
Cuyler Corp., Otto W.
Elgin Mfg. Co.
Eyrle Company
Ferguson Co., J. L.
Filler Machine Co.
Food Machinery and Chem. Corp.
Food Packers, Inc.
Girdler Process Equipment Div. Chemetron Corp.
Gray Co.
Horix Manufacturing Co.
Kiefer Machine Co.
King Sales and Engineering Co.
MRM Co.
Machinery Service Co.
Marathon, Div. American Can Co.
Mojonnier Bros. Co.
Pfaudler Co.
Redington Co., F. B.
Robins and Co., Inc., A. K.
Selbern Mfg. Co.
Thermovac Inc.
Union Standard Equipment Co.
U.S. Bottlers Machy. Co.
Wallace & Tiernan Inc.
Weigh Right Auto. Scale Co.
Woodman Co., Inc.

Filters, filter aids, strainers

Alsop Engineering Corp.
B-I-F Industries, Inc.
Brewers & Bottlers Equipment Corp.

There's a Fuller Plant near you

PLANT LOCATIONS

ST. PAUL, MINNESOTA
1144 Eustis St.
Phone: MI 6-8641
G. L. Ryberg, Mgr.

ATLANTA, GEORGIA
655 Mead Street S.E.
Phone: MA 7-1939
W. R. Mattox, Mgr.

BUFFALO, NEW YORK
1934 Elmwood Avenue
Phone: RIV 6366
G. A. McDougall, Mgr.

CHICAGO, ILLINOIS
904 W. Blackhawk St.
Phone: MI 2-6300
J. L. McIntyre, Mgr.

CINCINNATI, OHIO
4020 Cherry Street
Phone: MU 1-5420
H. B. Fuller, Jr., Mgr.

DALLAS, TEXAS
2217 Laws St.
Phone: RI 7-7315

KANSAS CITY, MISSOURI
200 Funston Rd.
Phone: FI 2-3615
R. E. Foley, Mgr.

LINDEN, NEW JERSEY
1201 Fuller Road
Phone: WA 5-2272
N. E. Liggett, Mgr.

LOS ANGELES, CALIF.
3250 Mines Avenue
Phone: AN 3-2113

MEMPHIS, TENNESSEE
802 Royal Avenue
Phone: JA 6-4212
C. E. Cramer, Mgr.

PORTLAND, OREGON
3332 N. W. Yeon Avenue
Phone: CA 3-6625

SO. SAN FRANCISCO, CALIF.
57 So. Linden Avenue
Phone: PL 6-5450
D. F. Barthelmess, Mgr.

TAMPA, FLORIDA
1803 2nd Avenue

FULLER WAREHOUSES
Richmond, Virginia
Westlaco, Texas
Cleveland, Ohio
Detroit, Michigan
Waltham (Boston), Massachusetts
Baltimore, Maryland

H. B. Fuller Co.
INDUSTRIAL ADHESIVES
St. Paul, Minn.

Equipment/Supplies Index

SECTION A
Preparation and Processing Equipment

Cambridge Wire Cloth Co.
Cherry-Burrell Corp.
Chicago Stainless Equipment Corp.
Cuyler Corp., Otto W.
Great Lakes Carbon Corp.
Infilco, Inc.
Kiefer Machine Co., Karl
Metal-Glass Products Co.
Niagara Filter Div., American Machine & Metal, Inc.
Rohm & Haas Co.
Terriss-Consolidated Industries
Thermovac Inc.

Finishers, pulpers, comminuters

Brown Citrus Machinery Corp.
Chisholm-Ryder Co., Inc.
Cog Corp.
Cuyler Corp., Otto W.
Fernholtz Machinery Co.
Food Machinery and Chem. Corp.
Griffith Laboratories, Inc.
Langsenkamp Co., F. H.
Rietz Mfg. Co.
Robins and Co., Inc., A. K.

Forming machinery, food

Basic Food Materials, Inc.
Mayfair Products Co.

Freezing equipment, supplies—compressors, blowers, refrigerant, etc.

Allied Chemical Corp., Nitrogen Div.
Amerio Contact Plate Freezers, Inc.
Barry-Wehmiller Machinery Co.
Belt-Ice Corp.
Brewers & Bottlers Equipment Corp.
Butler Mfg. Co.
Carrier Corp.
Creamery Package Mfg. Co.
Cyclomatic Freezing Systems
Dole Refrigerating Co.
Frick Co.
Gardner-Denver Co.
Girdler Process Equipment Div. Chemetron Corp.
King Co. of Owatonna
Kohlenberger Engineering Corp.
Liquefreeze Co.
Masterfreeze Corp.
Metal-Glass Products Co.
Niagara Blower Co.
Proctor & Schwartz, Inc.
Refrigeration Appliances, Inc.
Stokes Corp., F. J.
Tranter Mfg. Co., Inc.
Vilter Mfg. Co.
York Corp., Borg-Warner Corp.

Fryers

Atlas-Pacific Engineering Co.
Benner-Nawman, Inc.
Bridge Machine Co.
Central Steel and Tank Co.
Christian Engineers, J. D.

Graders, size

Allen Fruit Co., Inc.
Atlas-Pacific Engineering Co.
Benner-Nawman, Inc.
Berlin Chapman Co.
Chisholm-Ryder Co., Inc.
Commercial Mfg. and Supply Co.
Cuyler Corp., Otto W.
Dudley Machinery Corp.
Elliott Mfg. Co.
Ferrell and Co., A. T.
Food Machinery and Chem. Corp.
Huntley Mfg. Co.
Magnuson Engineers, Inc.
McLauchlan Co., A. B.
Pease Co., F. B.
Sinclair-Scott
Standard Machine Co.
Wallace and Tiernan, Inc.

Graders, quality

American Machinery Corp.
Atlas-Pacific Engineering Co.
Berlin Chapman Co.
Chisholm-Ryder Co., Inc.
Commercial Mfg. and Supply Co.
Cuyler Corp., Otto W.
Electric Sorting Machine Co. Div., Mandrel Ind., Inc.
Food Machinery and Chem. Corp.
Key Equipment Co.
National Starch and Chemical Corp.
Olney Inc., George J.
Wallace and Tiernan, Inc.

Heat exchangers

APV Co., Inc.
Barnes Co., W. F. and John
Berlin Chapman Co.
Brewers & Bottlers Equipment Corp.
Carrier Corp.
Cherry-Burrell Corp.
Chicago Stainless Equipment Corp.
Chisholm-Ryder Co., Inc.
Christian Engineers, J. D.
Corning Glass Works
Creamery Package Mfg. Co.
Dundon Iron Works
Frick Co.
Girdler Process Equipment Div. Chemetron Corp.
Groen Mfg. Co.
Hamilton Kettles Div., Brighton Corp.
Krenz Inc., Oscar
Langsenkamp Co., Inc., Frank
Mojonnier Brothers Co.
Niagara Blower Co.
Palmer Co., Harold L.
Pfaudler Permutit Inc.
Rietz Mfg. Co.
Southwestern Engineering Co.
Thermovac Inc.
York Div., Borg-Warner Corp.

Homogenizers, emulsifiers

Chemicolloid Labs.
Cherry-Burrell Corp.
Creamery Package Mfg. Co.
Fitzpatrick Co., W. J.
Girdler Process Equipment Div. Chemetron Corp.
Groen Mfg. Co.
Koch Equipment Co.
Logeman Co., C. W.
Manton Gaulin Mfg. Co.
Metal-Glass Products Co.
Rietz Mfg. Co.
Thermovac Inc.
United Co., The

Huskers, hullers, podders, viners

Cuyler Corp., Otto W.
Food Machinery and Chem. Corp.
Hamachek Machine Co., Frank
Robins and Co., Inc., A. K.
Scott Viner Co.
United Co., The

Kettles—cooking, steam-jacketed, tilting, agitated, vacuum

Atlas-Pacific Engineering Co.
Benner-Nawman, Inc.
Brewers & Bottlers Equipment Corp.
Chemicolloid Labs.
Cherry-Burrell Corp.
Chisholm-Ryder Co., Inc.
Cuyler Corp., Otto W.
Dundon Iron Works
Fernholtz Machinery Co.
Groen Mfg. Co.
Hamilton Kettles Div., Brighton Corp.
Hubbertand Son, Inc., B. B.
Koch Equipment Co.
Krenz Inc., Oscar
Langsenkamp Co., Inc., F. H.
Lee Metal Products Co.
Metal-Glass Products Co.
Pfaudler Co.
Robins and Co., Inc., A. K.
Terris-Consolidated Industries
Thermovac Inc.
Union Standard Equipment Co.
United Co., The

Lighting — grading and inspection

Macbeth Corp.
Nu-Lite Corp.
Terris-Consolidated Industries

Mills and grinders

Bauer Bros. Co.
Brewers & Bottlers Equipment Corp.
Chemicolloid Labs.
Cog Corp.
Day Co. Div., J. H.; Cleveland Automatic Machine Co.
Fernholtz Machinery Co.
Jeffrey Mfg. Co.
Metal-Glass Products Co.
Rietz Mfg. Co.
Southwestern Engineering Co.
Stokes Corp., F. J.
Sturtevant Mill Co.
Union Standard Equipment Co.
United Co., The
U. S. Stoneware Co.

Magnetic and electronic metal separators, traps

Barkley & Dexter Labs, Inc.
Brilmayer Laboratories, E. W.
Columbia Engineering Svc. Co.
Dings Magnetic Separator Co.
Fernholtz Machinery Co.
Infilco, Inc.
Jeffrey Mfg. Co.
Ladish Co., Tri Clover Div.
Radio Corp. of America

Presses

Albright Co., Thomas
Bauer Bros. Co.
Bliss Co., E. W.
Carver Inc., Fred S.
Cuyler Corp., Otto W.
Fernholtz Machinery Co.
Food Machinery and Chem. Corp.
Jones & Sons Co., E. D.
Terriss-Consolidated Industries

Retorts, retort crates and baskets, retort basket loaders

Atlas-Pacific Engineering Co.
Barnes Co., W. F. and John
Berlin Chapman Co.

What's the Address? Turn to alphabetical listings beginning on Page 42.

SPICE
IS
SPICE
...BUT

STANGE

makes seasoning a science

The ability to create and produce a seasoning to meet your exact needs, plus the assurance that it is in compliance with Food Additive Laws—*IS A SCIENCE AT STANGE.*

The ability and versatility to produce seasonings such as Soluble, Liquid, 50-A Microground® and Ground for all types of finished products *IS A SCIENCE AT STANGE.*

The technical skill to control the flavor potency of each and every shipment to precise specifications—*IS A SCIENCE AT STANGE.*

The talent to create . . . the skill to produce . . . and the flexibility to fit your needs—*IS THE MOTTO AT STANGE.*

WM. J. STANGE CO., Chicago 12, Ill.
Paterson 4, N. J.—Oakland 21, Calif.
Canada: Stange-Pemberton, Ltd., Toronto, Ont.
Mexico: Stange-Pesa, S. A., Mexico City

50-A Microground Spice® NDGA Antioxidant® Ground Spice
Cream of Spice Soluble Seasoning®
Peacock Brand Certified Food Color®

PRINTED IN U.S.A.

Equipment/Supplies Index

SECTION A
Preparation and Processing Equipment

Busse Bros.
Chisholm-Ryder Co., Inc.
Cuyler Corp., Otto W.
Dudley Machinery Corp.
Dundon Iron Works
Food Machinery and Chem. Corp.
Reid Boiler Works
Robins and Co., Inc., A. K.

Screens, shakers, sifters, strainers, reels

Allen Fruit Co., Inc.
Atlas-Pacific Engineering Co.
Bauer Bros Co.
Benner-Nawman, Inc.
Cambridge Wire Cloth Co.
Central Steel and Tank Co.
Colorado Fuel and Iron Corp.
Commerical Mfg. & Supply Co.
Day Co. Div., J. H.; Cleveland Automatic Machine Co.
Dudley Machinery Corp.
Fernholtz Machinery Co.
Food Machinery and Chem. Corp.
Green Bay Foundry & Machine Works
Huntley Mfg. Co.
Key Equipment Co.
Langsenkamp Co., F. H.
Link-Belt Co.
McLauchlan Co., A. B.
Olney Inc., George J.
Pease Co., F. B.
Productive Equipment Corp.
Scott Viner Co.
Simplicity Engineering Co.
Sinclair-Scott
Southwestern Engineering Co.
Spraying Systems, Inc.
Steinen Mfg. Co.
Stephens-Adamson Mfg. Co.
Sturtevant Mill Co.
Syntron Co.
United Co., The

Spray nozzles

Spraying Systems Co.

Tables — inspection, peeling, trimming

Allen Fruit Co., Inc.
Atlas-Pacific Engineering Co.
American Machinery Corp.
Anderson Bros. Mfg. Co.
Benner-Nawman, Inc.
Berlin Chapman Co.
Bridge Machine Co.
Chisholm-Ryder Co., Inc.
Cuyler Corp., Otto W.
Dunkley Co.
Elliott Mfg. Co.
Huntley Mfg. Co.
Langsenkamp Co., Inc., F. H.
Link-Belt Co.
Minnesota Mining and Mfg. Co.
Pease Co., F. B.
Rapids-Standard Co.
Robins and Co., Inc., A. K.
Standard Metal Products
Terriss-Consolidated Industries

Tanks

Adair Co., Inc., Robin W.
Alsop Engineering Corp.
Atlas-Pacific Engineering Co.
Benner-Nawman, Inc.
Berlin Chapman Co.
Brewers & Bottlers Equipment Corp.
Caldwell Co., W. E.
Central Steel and Tank Co.
Chemicolloid Labs.
Cherry-Burrell Corp.
Chisholm-Ryder Co., Inc.
Creamery Package Mfg. Co.
Dudley Machinery Corp.
Dundon Iron Works
Dunkley Co.
Frick Co.
Groen Mfg. Co.
Hamilton Kettles Div., Brighton Corp.
Hanson Equipment Co.
Krenz Inc., Oscar
Langsenkamp Co., F. H.
Lee Metal Products Co.
Metal-Glass Products Co.
Mojonnier Bros. Co.
Pease Co., F. B.
Pfaudler Permutit Inc.
Scott Viner Co.
Simpson Engineered Wood Products Co.
Thermovac Inc.
Union Standard Equipment Co.
United Co., The
U.S. Steel Corp.

Tank Covers

Adair Co., Inc., Robin W.

Washers—raw product

Atlas-Pacific Engineering Co.
Benner-Nawman, Inc.
Berlin Chapman Co.
Central Steel and Tank Co.
Chisholm-Ryder Co., Inc.
Christian Engineers, J. D.
Cuyler Corp., Otto W.
Dunkley Co.
Food Machinery and Chem. Co.
Huntley Mfg. Co.
Key Equipment Co.
McLauchlan Co., A. B.
Olney, Inc., Geo.
Robins and Co., Inc., A. K.
Scott Viner Co.
Sinclair-Scott
United Co., The
Wallace and Tiernan, Inc.

SECTION B
Food Ingredients and Additives

Acids, edible

Bzura Chemical Co.
Clinton Corn Processing Co.
Du Pont de Nemours & Co., E. I.
Merck and Co.
Miles Chemical Co. Div., Miles Laboratories, Inc.
Penick & Co., S. B.
Pfizer & Co., Chas.

Antioxidants

Archibald & Kendall, Inc.
Baltimore Spice Co.
Du Pont de Nemours & Co., E. I.
Fritzsche Brothers, Inc.
Griffith Laboratories, Inc.
Guardian Chemical Corp.
Hoffmann-LaRoche, Inc.
Merck and Co.
Miles Chemical Co. Div., Miles Laboratories, Inc.
Penick & Co., S. B.
Pfizer & Co., Chas.
Staley Mfg. Co., A. E.
Stange Company, Wm. J.

Breading, batter, etc.

Basic Food Materials, Inc.
Griffith Laboratories, Inc.

Citrus oils, juices, products

Dodge and Olcott, Inc.
Florasynth Laboratories, Inc.
Food Materials Corp.
Fritzsche Brothers, Inc.
Mutual Citrus Products
Penick & Co., S. B.
Reynaud, Ltd.
Sterwin Chemicals, Inc.
Sunkist Growers Products Sales Dept.

Colors, certified food

Archibald & Kendall, Inc.
Dodge and Olcott, Inc.
Florasynth Laboratories, Inc.
Fritzsche Brothers, Inc.
Glidden Co.
Griffith Laboratories, Inc.
Magnus, Mabee & Reynard, Inc.
Stange Company, Wm. J.
Union Starch and Refining Co.
Warner-Jenkinson Mfg. Co.
Woolson Spice Co.

Enzymes

Basic Food Materials, Inc.
Miles Chemical Co. Div., Miles Laboratories, Inc.
Penick & Co., S. B.
Rohm & Haas Co.

Essential oils

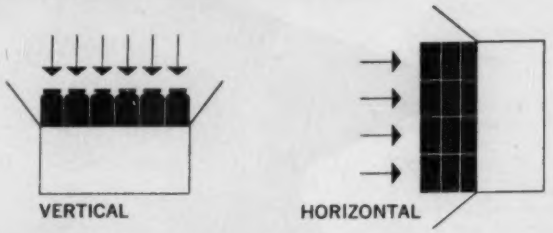
Baltimore Spice Co.
Dodge and Olcott, Inc.
Food Materials Corp.
Florasynth Laboratories, Inc.
Fritzsche Brothers, Inc.
Magnus, Mabee & Reynard, Inc.
Mayer & Sons Co., H. J.
Penick & Co., S. B.
Reynaud, Ltd.
Standardized Products Co.
Stange Company, Wm. J.

Flavors, flavor bases

Basic Food Materials, Inc.
Dodge and Olcott, Inc.
Firmenich, Inc.
Florasynth Laboratories, Inc.
Food Materials Corp.
Fries & Fries, Inc.
Fritzsche Brothers, Inc.
General Capsule Co.
Glidden Co.

What's the Address? Turn to alphabetical listings beginning on Page 42.

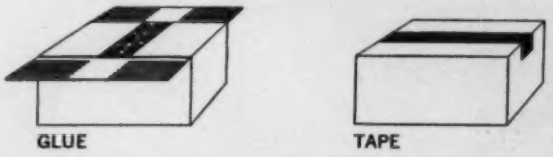
STANDARD-KNAPP CASE LOADERS



Horizontal and vertical loading — cans, bottles, jars, bags, cartons.

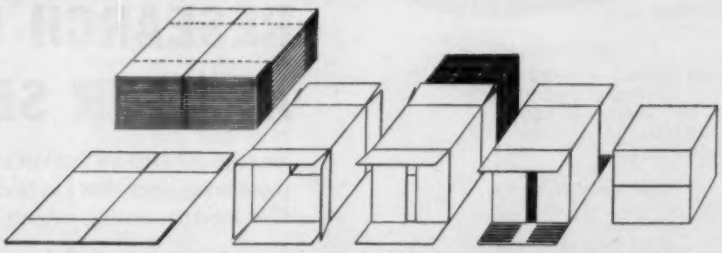
EXPERIENCE-ENGINEERED PACKAGING EQUIPMENT

STANDARD-KNAPP CASE SEALERS



Gluers with horizontal or vertical compression units.
Self-adjusting types. Automatic tape sealing units.

STANDARD-KNAPP INTEGER

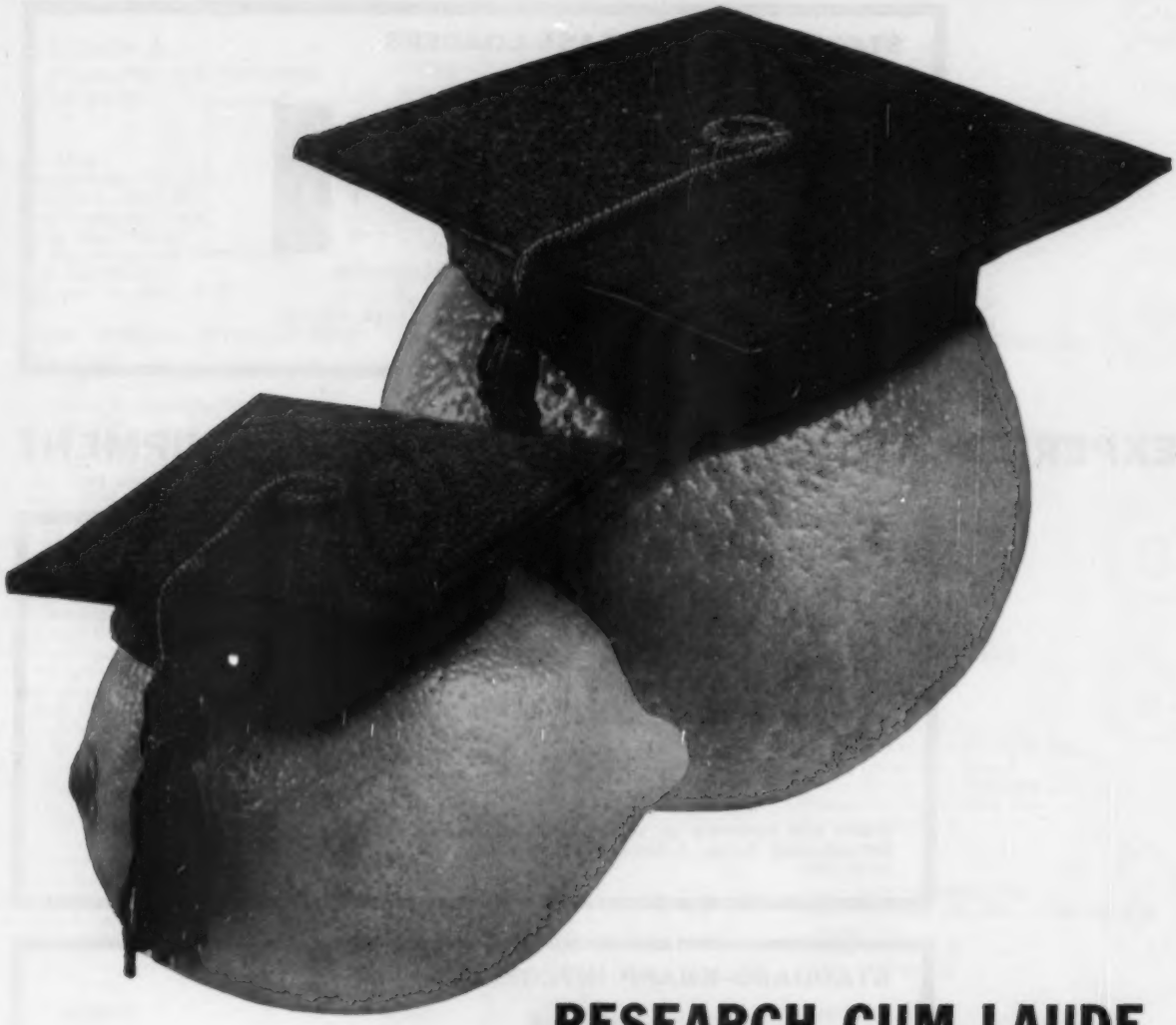


STANDARD-KNAPP LINE Case openers — packers — gluers and sealers
Unscramblers — collectors — boosters — labelers
Forming equipment for plastics packaging

PUT YOUR PACKAGING PROJECT TO EMHART FOR EXPERIENCE ENGINEERING

EMHART MANUFACTURING COMPANY / PORTLAND DIVISION / PORTLAND, CONNECTICUT

EMHART



RESEARCH CUM LAUDE AT YOUR SERVICE!

You can profit from Sunkist's citrus research—pioneering work that has been awarded 118 individual U.S. food processing patents.

It's at your service to help you convert "good" products into *superior* ones...cure production headaches...develop new products.

Sunkist research has already created over 400 products for industry out of California lemons and oranges—and discovered new uses for citrus in everything from pharmaceuticals to shrimp freezing.

Exchange

Sunkist technical experts will be glad to work *with* you—in your own plant—or *for* you—in their own citrus research laboratory. Write, and a Sunkist man will call on you.

Sunkist Growers

PRODUCTS SALES DEPARTMENT

CAN LEMON JUICE DO A JOB FOR YOU?

If you're a food processor... fresh, frozen or canned...fruits and vegetables...fish or fowl... lemon juice can do *at least* one thing for you:

- It can prevent or retard off-flavor tendencies...
- Maintain and even enhance natural food flavor—keep food fresh-tasting longer...
- Prevent oxidation, preserve color, texture and flavor during and after processing...
- Adjust acidity in low-acid foods–retard enzyme action...
- Replace salt in low-sodium diet foods...

And that's only a beginning. The list of jobs lemon juice can do is an extensive one.

If you're not using it...you may be letting the competition get a lead on you. Don't market a product that's merely "as good as" the rest. Exchange Brand Concentrated Lemon Juice—made by Sunkist—can often make it superior for only a penny or two—and add a selling ingredient of distinction to your label.

Why not let your Sunkist man talk it over with you?

The address: Sunkist Growers, Products Sales Dept., 720 E. Sunkist St., Ontario, Calif.

Equipment/Supplies Index

Griffith Laboratories, Inc.
Kohmstamm & Co., Inc., H.
Kraft Foods Div.
Magnus, Mabee & Reynard, Inc.
Penick & Co., S. B.
Reynaud, Ltd.
Rhodia, Inc.
Shulton, Inc., Fine Chem. Div.
Standardized Products Co.
Sterwin Chemicals, Inc.
Vico Products Co.
Warner-Jenkinson Mfg. Co.

Garlic, onion (powdered)

Archibald & Kendall, Inc.
Baltimore Spice Co.
Basic Food Materials, Inc.
Basic Vegetable Products
Gentry Div., Consolidated Foods Corp.
Glidden Co.
Griffith Laboratories, Inc.
Mayer & Sons Co., H. J.
Penick & Co., S. B.
Puccinelli Packing Co.
Stange Company, Wm. J.
Woolson Spice Co.

Gelatin

Griffith Laboratories, Inc.
Knox & Kinde
Penick & Co., S. B.

Gums, balsams

Fritzsche Brothers, Inc.
Magnus, Mabee & Reynard, Inc.
Marine Colloids, Inc.
Mayer & Sons Co., H. J.
Morningstar-Paisley, Inc.
Penick & Co., S. B.

Meat

Basic Food Materials, Inc.
Mayer & Sons Co., H. J.
Somerville Dressed Meat Co.

Monosodium glutamate

Ajinomoto Co. of N. Y., Inc.
Glidden Co.
Great Western Sugar Co.
Griffith Laboratories, Inc.
Hercules Powder Co.
International Minerals & Chemical Corp.
Mayer & Sons Co., H. J.
Merck and Co.
Staley Mfg. Co., A. E.
Woolson Spice Co.

Oils, vegetable

Clinton Corn Processing Co.
Glidden Co.
Penick & Co., S. B.
Staley Mfg. Co., A. E.

Oleoresins

Archibald & Kendall, Inc.
Baltimore Spice Co.
Dodge and Olcott, Inc.
Florasynth Laboratories, Inc.
Fries & Fries, Inc.
Fritzsche Brothers, Inc.
Griffith Laboratories, Inc.
Magnus, Mabee & Reynard, Inc.
Penick & Co., S. B.
Reynaud, Ltd.

What's the Address? Turn to alphabetical listings beginning on Page 42.

SECTION B
Food Ingredients and Additives

Standardized Products Co.
Stange Company, Wm. J.

Paprika

Archibald & Kendall, Inc.
Baltimore Spice Co.
Gentry Div., Consolidated Foods Corp.
Glidden Co.
Griffith Laboratories, Inc.
Magnus, Mabee & Reynard, Inc.
Mayer & Sons Co., H. J.
Penick & Co., S. B.
Stange Company, Wm. J.
Woolson Spice Co.

Pectin

Mutual Citrus Products
Penick & Co., S. B.
Speas Co.
Sunkist Growers

Pepper, pepper products

Archibald & Kendall, Inc.
Baltimore Spice Co.
Gentry Div., Consolidated Foods Corp.
Glidden Co.
Griffith Laboratories, Inc.
Mayer & Sons Co., H. J.
Penick & Co., S. B.
Stange Company, Wm. J.
Woolson Spice Co.

Protein Supplements

Crest Foods Co.
Gunther Products, Inc.
Kraft Foods Div.

Salt

Diamond Crystal Salt Co.
Hardy Salt Co.
International Salt Co.
Leslie Salt Co.
Morton Salt Co., Industrial Div.

Seasonings

Archibald & Kendall, Inc.
Baltimore Spice Co.
Dodge and Olcott, Inc.
Florasynth Laboratories, Inc.
Gentry Div., Consolidated Foods Corp.
Glidden Co.
Great Western Sugar Co.
Griffith Laboratories, Inc.
Hercules Powder Co.
Knickerbocker Mills
Magnus, Mabee & Reynard, Inc.
Mayer & Sons Co., H. J.
Standardized Products Co.
Stange Company, Wm. J.
Vico Products Co.
Woolson Spice Co.

Soup bases

Archibald & Kendall, Inc.
California Vegetable Concentrates, Inc.
Dodge and Olcott, Inc.
Griffith Laboratories, Inc.
Mayer & Sons Co., H. J.
Stange Company, Wm. J.
Vico Products Co.
Woolson Spice Co.

Spices

Archibald & Kendall, Inc.
Baltimore Spice Co.

SECTION B
Food Ingredients and Additives

Food Materials Corp.
Glidden Co.
Griffith Laboratories, Inc.
Knickerbocker Mills
McCormick & Co., Inc.
Mayer and Sons Co., H. J.
Penick & Co., S. B.
Standardized Products Co.
Stange Company, Wm. J.

Stabilizers, binders

Archibald & Kendall, Inc.
Baltimore Spice Co.
Glidden Co.
Griffith Laboratories, Inc.
Gunther Products, Inc.
Hercules Powder Co.
Hubinger Co.
Kelco Co.
Marine Colloids, Inc.
National Starch & Chem. Corp.

Starch

American Maize Products Co.
Anheuser-Busch, Inc.
Clinton Corn Processing Co.
Corn Products Co.
Hercules Powder Co.
Hubinger Co.
Morningstar-Paisley Products, Inc.
National Starch & Chem. Corp.
Penick & Ford, Ltd.
Quaker Oats Co.
Staley Mfg. Co., A. E.
Union Starch and Refining Co.

Sweeteners—beet, cane, corn

Amalgamated Sugar Co.
American Maize Products Co.
American Molasses Co.
American Sugar Refining Co.
Anheuser-Busch, Inc.
California & Hawaiian Sugar Refining Corp.
Clinton Corn Processing Co.
Corn Products Co.
Great Western Sugar Co.
Holly Sugar Corp.
Hubinger Co.
National Sugar Refining Co.
Penick & Ford Ltd., Inc.
Refined Syrups and Sugars, Inc.
Spreckels Sugar Company
Staley Mfg. Co., A. E.
Sugarine, Inc.
Union Starch and Refining Co.
Union Sugar Div., Consolidated Foods Corp.
Utah-Idaho Sugar Co.
Western Condensing Co.

Sweeteners—non-caloric

Abbott Laboratories
Du Pont de Nemours & Co., E. I.
Griffith Laboratories, Inc.
Hutchinson & Co., D. W.
Mutual Citrus Products
Penick & Co., S. B.
Pfizer & Co., Chas.

Vegetables, dehydrated

Basic Vegetable Products
California Vegetable Concentrates, Inc.
Gentry Div., Consolidated Foods Corp.
Glidden Co.
Puccinelli Packing Co.
Rogers Brothers Co., Food Products Div.
Washburn Wilson Seed Co.

Vinegar

Richter Sons Co., A. M.
Speas Co.

Vitamin products

Hoffmann-La Roche, Inc.
Merck and Co.
Penick & Co., S. B.
Pfizer & Co., Chas.
Vico Products Co.

Yeasts

Lake State Yeast & Chem. Co.

SECTION C
Raw Product Equipment and Supplies

Boxes, crates, bins, hampers

American Box Corp.
California Pine Box Distributors
Currie Machinery Co.
General Box Co.
Lewis, G. B.
Marvil Pkg. Div.
Republic Steel Corp.
Simpson Engineered Wood Products Co.
Tote Systems, Inc.

Canvas Equipment

Dow Canvass Products Co.

Dusters

Buffalo Turbine Agricultural Equipment Co.
Castle, Inc., A. L.
Food Machinery & Chem. Corp., John Bean Div.
Myers & Bro. Co., F. E.

Fertilizers, plant food

Allied Chemical Corp., Nitrogen Div.
American Cyanamid Co.
California Spray Chemical Corp. Div., Standard Oil of Calif.
Castle, Inc., A. L.
Collier Carbon & Chem. Corp.
Du Pont de Nemours & Co., E. I.
Hercules Powder Co.
International Minerals & Chemical Corp.
Miller Chem. & Fertilizer Corp.
Monsanto Chemical Co.
Sohio Chemical Co.
Stauffer Chemical Co.
Swift & Co.
U.S. Steel Corp.

Fungicides

American Cynamid Co.
California Spray Chemical Corp. Div., Standard Oil of Calif.
Castle, Inc., A. L.
Chapman Chemical Co.
Dow Chemical Co.
Du Pont de Nemours & Co., E. I.
Food Machinery and Chem. Corp.
Miller Chem. & Fertilizer Corp.
Pennsalt Chemicals Corp.
Phelps Dodge Refining Corp.
Rohm & Haas Co.
Standard Agricultural Chemical, Inc.
Stauffer Chemical Co.
Union Carbide Chemical Co.
U.S. Rubber Co., Naugatuck Chems. Div.

Harvesters, combines

Allis-Chalmers Manufacturing Co.
Chisholm-Ryder Co., Inc.
Cuyler Corp., Otto W.
Farmhand Div., Superior Separator Co.
Food Machinery and Chem. Corp., John Bean Div.
Hume Company, H. D.
Love Co., J. E.
NuWay Harvester Co.
Paulson Bros. Industries, Inc.
Porter-Way Harvester Mfg. Co.
Robins and Co., Inc., A. K.
Scott Viner Co.

Herbicides (weed killers)

American Cynamid Co.
California Spray Chemical Corp. Div., Standard Oil of Calif.
Chapman Chemical Co.
Dow Chemical Co.
Du Pont de Nemours & Co., E. I.
Geigy Agricultural Chemicals
Pennsalt Chemicals Corp.
Miller Chemical & Fertilizer Corp.
Monsanto Chemical Co.
Sanfax Co.
Standard Agricultural Chemicals, Inc.
Stauffer Chemical Co.
U.S. Rubber Co., Naugatuck Chems. Div.

Insecticides

American Cynamid Co.
California Spray Chemical Corp. Div. Standard Oil of Calif.
Castle, Inc., A. L.
Chapman Chemical Co.
Dow Chemical Co.
Du Pont de Nemours & Co., E. I.
Fairfield Chemicals, Food Machinery and Chemical Corp.
Geigy Agricultural Chemicals
Hercules Powder Co.
Holcomb Mfg. Co., J. I.
Huntington Laboratories, Inc.
Miller Chemical & Fertilizer Corp.
Monsanto Chemical Co.
Penick & Co., S. B.
Pennsalt Chemicals Corp.
Rohm & Haas Co.
Sanfax Co.
Shell Chemical Co.
Stauffer Chemical Co.
Union Carbide Chemical Co.
U.S. Rubber Co., Naugatuck Chems. Div.

Irrigation equipment

Allis-Chalmers Manufacturing Co.
Champion Corp.
Fernholtz Machinery Co.
Food Mchry. & Chem. Corp., John Bean Div.
Industrial Instruments, Inc.
Myers & Bro. Co., F. E.

What's the Address? Turn to alphabetical listings beginning on Page 42.

You can't run a bluff...when you're betting on machinery performance!

Raking in the pot when we're "called" to bet our labeling machine against all comers is real *straight poker*. Only the facts count . . . a machine cannot bluff its competitor.

In several instances we have been in that kind of game . . . our machine *in* the plant . . . competition offering to put theirs in on a trial "winner-take-all" basis. We've yet to lose and we're confident that no other labeling machine, anywhere, will match the all-round production and versatility of the Super C.M. in the foreseeable future.

There are some mighty good reasons for this advantage. Reasons that were designed into the machine before it left the drawing boards. *Over 150 Super C.M.s are now in field operation.*

Your WORLD Sales Engineer will be happy to show you 18 reasons why you should bet on the Super C.M., too! May we arrange a meeting?

WORLD LABELERS

ECONOMIC MACHINERY COMPANY • WORCESTER 3, MASS. / Division of Geo. J. Meyer Manufacturing Company

SECTION C
Raw Product Equipment and Supplies

Nailing Machines—boxes, bins, pallets, etc.

General Nailing Machine Co.
Spotnails, Inc.

Seed inoculants, disinfectants

California Spray Chemical Corp. Div., Standard Oil of Calif.
Castle, Inc., A. L.
Du Pont de Nemours & Co., E. I.
Kromer Co., O. W.
Stauffer Chemical Co.

Seeds and plants, canning and freezing varieties

Asgrow Seed Co.
Brown Co., Clarence
Burpee Co., W. Atlee
Burrell Seed Growers Co., D. V.
Castle, Inc., A. L.
Charter Seed Co.
Corneli Seed Co.
Ferry-Morse Seed Co.
Gallatin Valley Seed Co.
Michael-Leonard Co.
Morrison Bros. Seed Co., Dishman Branch
Northrup King & Co.
Peto Seed Co.
Pure Line Seeds, Inc.
Robinson & Sons, Lawrence
Rogers Bros. Co.
Seed Research Specialists
Sweet Corn Research, Inc.
Washburn Wilson Seed Co.

Soil fumigants

California Spray Chemical Corp. Div., Standard Oil of Calif.
Castle, Inc., A. L.
Dow Chemical Co.
Du Pont de Nemours & Co., E. I.
Food Machinery & Chem. Corp., Niagara Chem. Div.
Miller Chemical & Fertilizer Corp.
Stauffer Chemical Co.
Union Carbide Chemical Co.

Soil testing equipment and supplies

Industrial Instruments, Inc.

Soil conditioners and supplements

California Spray Chemical Corp. Div., Standard Oil Co. of Calif.
Geigy Agricultural Chemicals
Ludlow Corp.

Sprayers, power

Buffalo Turbine Agricultural Equipment Co.
Fernholtz Machinery Co.
Food Machinery & Chem. Corp., John Bean Div.
Gray Co.
Hanson Equipment Co.
Hardie Mfg. Co., Inc.
Kromer Co., O. W.
Myers & Bro. Co., F. E.
Oliver Corp.

Transplanters, planters, supplies

Ball, Inc., George J.
Holland Transplanter Co.
Oliver Corp.

Viners, pea and bean

Cuyler Corp., Otto W.
Hamachek Machine Co., Frank
Scott Viner Co.

Wood preservatives for field boxes, etc.

Chapman Chemical Co.
Chem-Guard Products, Inc.
Darworth, Inc.
Miller Chemical & Fertilizer Corp.
Protection Products Mfg. Co.
Scientific Oil Compounding Co., Inc.

What's the Address? Turn to alphabetical listings beginning on Page 42.

SECTION D
Maintenance, Lubrication, Sanitation Equipment and Supplies

Aprons, gloves, uniforms, hair nets and caps, etc.

Arlington Industries
Associated Bag & Apron Co.
Bemis Bros. Bag Co.
Canners Supply, The
Creamery Package Mfg. Co.
Edmont Inc.
Goodrich Industrial Products Co., B. F.
Harris Machinery Co.
Hood Industrial Gloves & Footwear
Independent Supply Co.
Paperlynen Co.
Pioneer Rubber Co.
Wilson Rubber Co.

Brooms, brushes

Canners Supply, The
Cherry-Burrell Corp.
Creamery Package Mfg. Co.
Holcomb Mfg. Co.
Jenkins Sons Inc., M. W.
Klenzade Products, Inc.

Cement, corrosion - resistant, patching compounds, floor surfacing, etc.

Allen Machinery & Equipment Co.
Armstrong Cork Co.
Cherry-Burrell Corp.
Creamery Package Mfg. Co.
Master Mechanics Co.
Minnesota Mining & Mfg. Co.
Pennsalt Chemicals Corp.
Tropical Paint Company
Truscon Laboratories

Chairs, stools

Ajusto Equipment Co.

Compounds, anti-rust

Diversey Corp.
DuBois Chemicals, Inc.
Du Pont de Nemours & Co., E. I.
Keystone Lubricating Co.
Miranol Chemical Co.
Oakite Products, Inc.
Sealube Co.
Wyandotte Chemicals Corp., J. B. Ford Div.

Compounds, container-washing

Cherry-Burrell Corp.
Diversey Corp.
DuBois Chemicals, Inc.
Du Pont de Nemours & Co., E. I.
Gray Co.
Klenzade Products, Inc.
Miranol Chemical Co.
Oakite Products, Inc.
Pennsalt Chemicals Corp.
Wyandotte Chemicals Corp., J. B. Ford Div.

Compounds, germicidal, disinfectant

Diversey Corp.
DuBois Chemicals, Inc.
Du Pont de Nemours & Co., E. I.
Griffith Laboratories, Inc.
Holcomb Mfg. Co.
Huntington Laboratories, Inc.
Klenzade Products, Inc.
Oakite Products, Inc.
Pennsalt Chemicals Corp.
Rohm & Haas Co.
Scientific Oil Compounding Co., Inc.
Wallace and Tiernan, Inc.
Wyandotte Chemicals Corp., J. B. Ford Div.

Compounds, hand-cleaning and hand-protection

Diversey Corp.
DuPont de Nemours & Co., Inc.
Finnell System, Inc.
Huntington Laboratories, Inc.
Klenzade Products, Inc.
Oakite Products, Inc.
Sanfax Co.
Tropical Paint Company

Compounds, plant cleaning

Cherry-Burrell Corp.
Clayton Mfg. Co.
Detrex Chemical Industries, Inc.
Diversey Corp.
DuBois Chemicals, Inc.
Finnell System, Inc.
Gray Co.
Holcomb Mfg. Co.
Huntington Laboratories, Inc.
Klenzade Products, Inc.
Miranol Chemical Co.
Oakite Products, Inc.
Pennsalt Chemicals Corp.
Rhodia Inc.
Sanfax Co.
Wallace and Tiernan, Inc.
Wyandotte Chemicals Corp., J. B. Ford Div.

FIBRE ZIP...NEW END-LOADING, TOP-OPENING CANNERY CASE!

At last, a cannery case that's as easy to open as pulling a tab. And as economical as only an end-loading case can be. That's Fibreboard's new Fibre Zip!

Your institutional and retail trade will really go for its top-loading convenience. No more tug-of-wars with stubborn glued-down flaps... no more complaints about end openings.

And just look at these other outstanding features: level-best construction for a smooth ride top and bottom... easily recloseable lid for neater storage... continued product identity with case markings still intact after opening... and compliance with Rule 41 to give you complete freedom from permit problems or freight penalties.

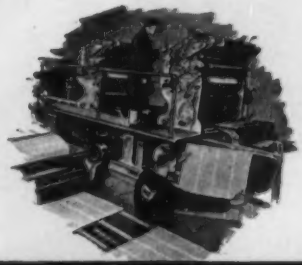
Ask your Fibreboard representative to tell you more about how Fibre Zip can put new zip into *your* canned food sales!

Fibre Zip is another example of Fibreboard research and imagination directed toward solving today's marketing problems through better packaging.

FIBREBOARD
PAPER PRODUCTS CORPORATION
475 Brannan Street, San Francisco, California

PRODUCT RESEARCH

ENGINEERING



LITHOGRAPHY

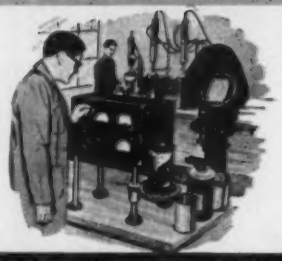
CLOSING MACHINERY

NATIONAL CAN

Personal Service

SALES SERVICE

DESIGN



RESEARCH DEVELOPMENT

Combine a keen and personal interest in your products and your processes with our sincere desire to be of help . . . and you have *NATIONAL CAN'S — "Personal Service!"* Why not let us survey your needs — you'll see how much more you get from NATIONAL CAN.

NATIONAL CAN CORPORATION

CHICAGO • NEW YORK • SAN FRANCISCO . . . PLANTS FROM COAST TO COAST

Compounds, scale removal

Clayton Mfg. Co.
Diversey Corp.
DuBois Chemicals, Inc.
Huntington Laboratories, Inc.
Klenzade Products, Inc.
Oakite Products, Inc.
Pennsalt Chemicals Corp.
Wyandotte Chemicals Corp., J. B. Ford Div.

Defoamers

Dow Corning Corp.

Equipment, cleaning (guns, etc.)

Allen Machinery & Equipment Co.
Champion-Pneumatic Machy. Co.
Circo Equipment Co.
Clayton Mfg. Co.
D and M Products, Inc.
Diversey Corp.
DuBois Chemicals, Inc. ..
Farquhar Div., A. B., The Oliver Corp.
Gray Co.
Klenzade Products, Inc.
Oakite Products, Inc.
Oliver Corp.
Sellers Injector Corp.

Equipment, in-plant chlorination

DuBois Chemicals, Inc.
Fischer & Porter Co.
Klenzade Products, Inc.
Wallace and Tiernan, Inc.

Equipment, insect-killing, insect-repelling

Curtis Automotive Devices, Inc.
Diversey Corp.
Gardner Mfg. Co.
Hanson Equipment Co.
Holcomb Mfg. Co.
Huntington Laboratories, Inc.
King Co. of Owatonna

Equipment, other maintenance

Fernholtz Machinery Co.
Gardner-Denver Co.
Gray Co.
Holcomb Mfg. Co.
Huntington Laboratories, Inc.
Stewart-Warner Corp.
Terriss-Consolidated Industries

Floor mats

Creamery Package Mfg. Co.
Cyclone Fence Dept., American Steel & Wire Div., U.S. Steel
Goodrich, B. F.
Holcomb Mfg. Co.
Huntington Laboratories, Inc.
La Port Mat & Mfg. Co.
Ton-Tex Corp.

Fumigants, fumigating equipment and service

Huntington Laboratories, Inc.
Rhodia Inc.

What's the Address? Turn to alphabetical listings beginning on Page 42.

Ice machines

Belt Ice Corp.
Frick Co.
Kohlenberger Engineering Corp.
Link-Belt Co.
York Div., Borg-Warner Corp.

Insulation — pipe, boiler, freezer, cold storage, doors

Armstrong Cork Co.
Belt-Ice Corp.
Clark Door Co.
Fibreboard Paper Products Corp.
Ludlow Corp.
Pittsburg Corning Corp.
United Cork Companies

Lubricants, greases, oils

Cherry-Burrell Corp.
Diversey Corp.
Dow Corning Corp.
Famous Lubricants, Inc.
Huntington Laboratories, Inc.
Keystone Lubricating Co.
Lubriplate Div., Fiske Bros. Refining Co.
Richfield Oil Corp.
Standard Oil Co. of Calif.
Stewart-Warner Corp.

Lockers, metal bins

Republic Steel Corp.

Odor control chemicals and equipment

Airkem, Inc.
Associated Specialties Co.
Brooks Chemicals, Inc.
Diversey Corp.
DuBois Chemicals, Inc.
Florasynth Laboratories, Inc.
Holcomb Mfg. Co.
Huntington Laboratories, Inc.
Klenzade Products, Inc.
Oakite Products, Inc.
Penick & Co., S. B.
Rhodia, Inc.
Sanfax Co.
Wallace and Tiernan, Inc.

Paints, conventional

Canners Supply, The
Chem-Guard Products, Inc.
Cherry-Burrell Corp.
Du Pont de Nemours & Co., E. I.
Fibreboard Paper Products Corp.
Sealube Co.
Tropical Paint Company

Paints, corrosion - resistant, germicidal, etc.

Champion Bronze Powder & Paint Co., Inc.
Chem-Guard Products, Inc.
Cherry-Burrell Corp.
Creamery Package Mfg. Co.
Du Pont de Nemours & Co., E. I.
Koch Equipment Co.
Pennsalt Chemicals Corp.
Rust-Oleum Corp.
Scientific Oil Compounding Co., Inc.
Tropical Paint Company

Waste disposal equipment and systems

Champion Corp.
Fernholtz Machinery Co.
Fischer & Porter Co.
Infilco, Inc.
Jeffrey Mfg. Co.
Link Belt Co.
Productive Equipment Corp.
Robins and Co., Inc., A. K.
Wallace and Tiernan, Inc.
Yeomans Bros. Co.
WEMCO, Div., Western Machy. Co.

Water conditioning equipment

Barnstead Still and Sterilizer Co.
Chicago Stainless Equipment Corp.
Clayton Mfg. Co.
Cochrane Corp.
Infilco, Inc.
Klenzade Products, Inc.
Terriss-Consolidated Industries.
Wallace and Tiernan, Inc.

SECTION E
Handling, Conveying and Power Equipment

Bearings

Chain Belt Co.
Dodge Mfg. Corp.
Dunkley Co.
Link-Belt Co.
Stephens-Adamson Mfg. Co.

Belt fasteners and lacers

Canners Supply, The
Clipper Belt Lacer Co.
Dunkley Co.
Flexible Steel Lacing Co.
Globe Woven Belting Co., Inc.
Goodrich Industrial Products Co., B. F.
Ton-Tex Corp.
Voss Belting and Spec. Co.

Belting, conveyor and inspection

Alloy Wire Belt Co.
Bridge Machine Co.
Buffalo Weaving & Belting Co.
Cambridge Wire Cloth Co.
Cherry-Burrell Corp.
Cyclone Fence Dept., American Steel & Wire Div., U.S. Steel
Fabreka Products Co.
Food Machinery and Chem. Corp.
Fostoria Corp.
Globe Woven Belting Co., Inc.
Goodrich Industrial Products Co., B. F.
Hamachek Machine Co., Frank
La Port Mat & Mfg. Co.
Link-Belt Co.
Robins and Co., Inc., A. K.
Sandvik Steel, Inc., Belt Conveyor Div.
Standard Conveyor Co.
Thermoid Div., H. K. Porter Co., Inc.
Ton-Tex Corp.
U. S. Rubber Co.
Voss Belting and Spec. Co.

Belting, power transmission

Dodge Mfg. Corp.
Fabreka Products Co.
Gates Rubber Co.

Equipment/Supplies Index

Globe Woven Belting Co., Inc.
Goodrich Industrial Products Co., B. F.
Hamachek Machine Co., Frank
Link-Belt Co.
Ton-Tex Corp.
U. S. Rubber Co.
Voss Belting and Spec. Co.

Belting, woven wire

Alloy Wire Belt Co.
Ashworth Bros., Inc.
Audubon Metalweave Belt Div.
Bridge Machine Co.
Cambridge Wire Cloth Co.
Colorado Fuel and Iron Corp.
Cyclone Fence Dept., American Steel & Wire Div., U.S. Steel
Dunkley Co.
Fostoria Corp.
Key Equipment Co.
Pacific Wire Works Co.
Robins and Co., Inc., A. K.
Thermoid Div., H. K. Porter Co.
U. S. Rubber Co.
Voss Belting and Spec. Co.

Boilers, related equipment

American-Standard Industrial Div.
Brewers & Bottlers Equipment Corp.
Butler Mfg. Co.
Cherry-Burrell Corp.
Clayton Mfg. Co.
Cochrane Corp.
Dundon Iron Works
Orr & Sembower, Inc.

Bulk storage equipment

Corrigan Co., Inc., J. C.
Dundon Iron Works
Pfaudler Permutit Inc.
Simpson Engineered Wood Products Co.
Smith Corp., A. O.
Stephens-Adamson Mfg. Co.
Thermovac Inc.
Tote Systems, Inc.

Conveyors and elevators — apron and slat

Alvey Conveyor Mfg. Co.
American Machinery Corp.
Benner-Nawman, Inc.
Bridge Machine Co.
Chain Belt Co.
Christian Engineers, J. D.
Commercial Mfg. & Supply Co.
Corrigan Co., Inc., J. C.
Farquhar Div., A. B., Conveyor Systems, Inc.
Island Equipment Corp.
Jeffrey Mfg. Co.
Link-Belt Co.
Mathews Conveyor Co.
National Five-Point, Inc.
Robins and Co., Inc., A. K.
Scott Viner Co.
Standard Conveyor Co.

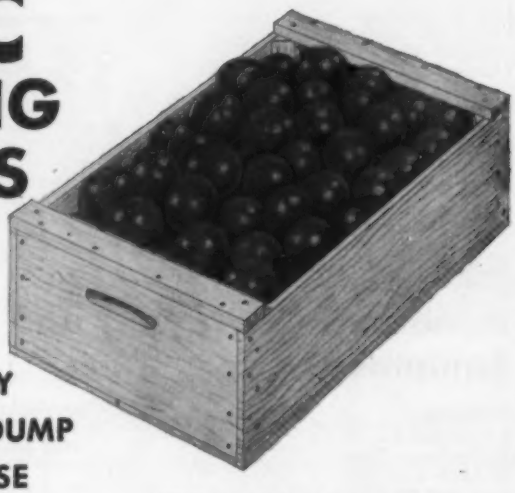
Conveyors and elevators—belt

Alvey Conveyor Mfg. Co.
Alvey-Ferguson Co.
American Can Co.
American Machinery Corp.
Bemis Bros. Bag Co.
Benner-Nawman, Inc.
Brewers & Bottlers Equipment Corp.
Bridge Machine Co.
Can Conveyors, Inc.
Chain Belt Co.
Cherry-Burrell Corp.
Commercial Mfg. & Supply Co.
Corrigan Co., Inc., J. C.
Creamery Package Mfg. Co.
Dunkley Co.
Farquhar Div., A. B., Conveyor Systems, Inc.
Goodrich Industrial Products Co., B. F.
Howe Scale Co.
Island Equipment Corp.
Jeffrey Mfg. Co.
Key Equipment Co.
Link-Belt Co.
Mathews Conveyor Co.
National Five-Point, Inc.
Pease Co., F. B.
Rapids-Standard Co.
Robins and Co., Inc., A. K.
Sandvik Steel, Inc., Belt Conveyor Div.
Standard Conveyor Co.
Stephens-Adamson Mfg. Co.
Terriss-Consolidated Industries
Weigh Right Auto. Scale Co.

Conveyors and elevators — bucket

American Machinery Corp.
Benner-Nawman, Inc.
Brewers & Bottlers Equipment Corp.
Bridge Machine Co.
Butler Mfg. Co.
Chain Belt Co.
Christian Engineers, J. D.
Corrigan Co., Inc., J. C.
Ferrell and Co., A. T.
Food Machinery and Chem. Corp.
Food Packers, Inc.
Goodrich Industrial Products Co., B. F.
Huntley Mfg. Co.

ASK US HOW
YOU CAN REDUCE
Handling COSTS
WITH
ABC
PICKING
BOXES
that



- PALLETIZE
- STACK EVENLY
- AUTOMATIC DUMP
- REDUCE BRUISE DAMAGE
- HAVE LONG LIFE
- SAVE SPACE

ABC's vast forest, sawmill and factory facilities assure immediate service.

We will gladly send information on the use of wooden picking boxes in mass production and automation handling methods.

American Box Corporation
2740 HYDE ST. SAN FRANCISCO 19, CALIF.

Equipment/Supplies Index

Jeffrey Mfg. Co.
Link-Belt Co.
National Five-Point, Inc.
Robins and Co., Inc., A. K.
Scott Viner Co.
Stephens-Adamson Mfg. Co.
Thermoid Div., H. K. Porter Co., Inc.
Weigh Right Auto. Scale Co.

Conveyors and elevators—chain

Alvey Conveyor Mfg. Co.
American Can Co.
American Machinery Corp.
Benner-Nawman, Inc.
Biner Ellison Machinery Co.
Bridge Machine Co.
Burton Machine Corp.
Chain Belt Co.
Cherry-Burrell Corp.
Christian Engineers, J. D.
Commerical Mfg. & Supply Co.
Diamond Chain Co., Inc.
Farquhar Div., A. B., Conveyor Systems, Inc.
Goodrich Industrial Products Co., B. F.
Hamachek Machine Co., Frank
Horix Manufacturing Co.
Island Equipment Corp.
Jeffrey Mfg. Co.
Link-Belt Co.
Mathews Conveyor Co.
Mojonnier Bros. Co.
National Five-Point, Inc.
Pease Co., F. B.
Rapids-Standard Co.
Robins and Co., Inc., A. K.

Conveyors—hydraulic and pneumatic

Benner-Nawman, Inc.
Chisholm-Ryder Co., Inc.
Creamery Package Mfg. Co.
Fluidizer Div., Superior Separator Co.
Mathews Conveyor Co.
National Five-Point, Inc.
Scott Viner Co.

Conveyors and elevators—roller or wheel

Alvey Conveyor Mfg. Co.
American Machinery Corp.
Benner-Nawman, Inc.
Brewers & Bottlers Equipment Corp.
Cherry-Burrell Corp.
Creamery Package Mfg. Co.
Farquhar Div., A. B., The Oliver Corp.
Island Equipment Corp.
Magline, Inc.
Mathews Conveyor Co.
National Five-Point, Inc.
Rapids-Standard Co.
Standard Conveyor Co.

Conveyors and elevators—screw or spiral

American Machinery Corp.
Atlas-Pacific Engineering Co.
Benner-Nawman, Inc.
Bliss Co., E. W.
Brewers & Bottlers Equipment Corp.
Bridge Machine Co.
Christian Engineers, J. D.
Corrigan Co., Inc., J. C.
Day Co. Div., J. H.; Cleveland Automatic Machine Co.
Jeffrey Mfg. Co.
Link-Belt Co.
Mathews Conveyor Co.

Conveyors and elevators — vibrating

Allen Fruit Co., Inc., Machinery Div.
Atlas-Pacific Engineering Co.
Chisholm-Ryder Co., Inc.
Cleveland Vibrator Co.
Corrigan Co., Inc., J. C.
Ferrell and Co., A. T.
Hamachek Machine Co., Frank
Jeffrey Mfg. Co.
Key Equipment Co.
Link-Belt Co.
Robins and Co., Inc., A. K.
Scott Viner Co.
Simplicity Engineering Co.
Stephens-Adamson Mfg. Co.
Syntron Co.

Drives—chain, belt

Atlas-Pacific Engineering Co.
Biner Ellison Machinery Co.
Christian Engineers, J. D.
Diamond Chain Co., Inc.
Dodge Mfg. Corp.
Hamachek Machine Co., Frank
Jeffrey Mfg. Co.
Link-Belt Co.
Morse Chain Co.
Sterling Electric Motors, Inc.

Drives—fluid and clutch

American Standard Industrial Div.
Dodge Mfg. Corp.
Link-Belt Co.
Westinghouse Electric Corp.

Drives—gear

Biner Ellison Machinery Co.
Christian Engineers, J. D.
Creamery Package Mfg. Co.
Dodge Mfg. Corp.
Falk Corp.
Link-Belt Co.
Sterling Electric Motors
Stevens-Adamson Mfg. Co.
U.S. Electrical Motors
Von Opel Corp., Georg
Western Gear Corp.
Westinghouse Electric Corp.

Drives—variable speed

Biner Ellison Machinery Co.
Creamery Package Mfg. Co.
Falk Corp.
Link-Belt Co.
Morse Chain Co.
Reeves Pulley Co. Div., Reliance Electric and Engineering Co.
Sterling Electric Motors
U.S. Electrical Motors
Western Gear Corp.
Westinghouse Electric Corp.

Dumpers—raw products

Benner-Nawman, Inc.
Commerical Mfg. & Supply Co.
Dudley Machinery Corp.
Scott Viner Co.
Stevens-Adamson Mfg. Co.
Terriss-Consolidated Industries
Thermovac Inc.
Tote Systems, Inc.

What's the Address? Turn to alphabetical listings beginning on Page 42.

SECTION E
Handling, Conveying and Power Equipment

Elevators—containers

Albertoli, John
American Can Co.
Benner-Nawman, Inc.
Can Conveyors, Inc.
Dudley Machinery Corp.
Link-Belt Co.
National Five-Point, Inc.
Peco Corp.

Elevators—product

Albright Co., Thomas
Atlas-Pacific Engineering Co.
Benner-Nawman, Inc.
Christian Engineers, J. D.
Dudley Machinery Corp.
Jefferey Mfg. Co.
Link-Belt Co.
Scott Viner Co.

Feeders

Allen Fruit Co., Inc.
Benner-Nawman, Inc.
Christian Engineers, J. D.
Cleveland Vibrator Co.
Commercial Mfg. & Supply Co.
Infilco, Inc.
Jeffrey Mfg. Co.
Key Equipment Co.
Link-Belt Co.
Machinery Service Co., Inc.
Richardson Scale Co.
Scott Viner Co.
Simplicity Engineering Co.
Southwestern Engineering Co.
Stephens-Adamson Mfg. Co.
Syntron Co.
United Co., The
Wallace and Tiernan, Inc.
Woodman Co., Inc.

Fittings, pipe, tubing

Barnstead Still and Sterilizer Co.
Cherry-Burrell Corp.
Corning Glass Works
Creamery Package Mfg. Co.
G and H Products Corp.
Goodrich Industrial Products Co., B. F.
Owens-Illinois Glass Co.
Ladish Co., Tri-Clover Div.
Pick Mfg. Co.
Scott Viner Co.
Terriss-Consolidated Industries
Tube Turns Plastics, Inc.
U.S. Stoneware Co., Plastics & Synthetics Div.

Hoppers

Brewers & Bottlers Equipment Corp.
Bridge Machine Co.
Corrigan Co., Inc., J. C.
Dudley Machinery Corp.
Ferrell and Co., A. T.
Key Equipment Co.
Krenz Inc., Oscar
Link-Belt Co.
Richardson Scale Co.
Tote Systems, Inc.

Hose—water, steam, air, etc.

Cherry-Burrell Corp.
Creamery Package Mfg. Co.
Goodrich Industrial Products Co., B. F.
Gray Co.
Metal-Glass Products Co.

SECTION E
Handling, Conveying and Power Equipment

Robins and Co., Inc., A. K.
Stewart-Warner Corp.
Thermoid Div., H. K. Porter Co., Inc.
U. S. Rubber Co.

Lift trucks, powered

Allied Mfg. & Sales Co.
Allis-Chalmers Manufacturing Co.
Baker Industrial Trucks Div., Otis Elevator Company
Clark Equipment Co.
Hyster Co.
Lift Trucks, Inc.
Moto-Truc Co.
Towmotor Corporation
Yale & Towne Mfg. Co.

Motors, electric

Brook Motor Corp.
Fairbanks, Morse & Co.
Hamachek Machine Co., Frank
Reliance Electric & Engineering Co.
Robbins & Myers, Inc.
Sterling Electric Motors, Inc.
U.S. Electrical Motors
Westinghouse Electric Corp.

Pallets, pallet bins

American Box Corp.
General Box Co.
Magline, Inc.
Pacific Wine Works Co.
Republic Steel Corp.
Simpson Engineered Wood Products Co.

Pumps

Alsop Engineering Corp.
Anderson Bros. Mfg. Co.
B-I-F Industries, Inc.
Champion-Pneumatic Machinery Co.
Cherry-Burrell Corp.
Creamery Package Mfg. Co.
Fairbanks, Morse & Co.
Fernholtz Machinery Co.
Food Machinery and Chem. Corp.
G and H Products Corp.
Gardner-Denver Co.
Gray Co.
Hanson Equipment Co.
Hardie Mfg. Co., Inc.
Key Equipment Co.
Ladish Co., Tri-Clover Div.
Manton Gaulin Mfg. Co.
Metal-Glass Products Co.
Robbins & Myers, Inc.
Scott Viner Co.
Sinclair-Scott
Thermovac Inc.
U.S. Steel Corp.
Viking Pump Co.
Wallace & Tiernan, Inc.
Waukesha Foundry Co., Pump Div.
Western Machinery Co.

Racks — dehydrating, freezing, storage

Bridge Machine Co.
Key Equipment Co.
Pacific Wire Works Co.
Palmer-Shile Co.
Rapids-Standard Co.
Terriss-Consolidated Industries
Tranter Mfg. Co., Inc.

Trailers and highway trucks

Boyertown Auto Body Works
Ford Motor Co.
General Motor Corp.
Magline, Inc.

Valves

Cherry-Burrell Corp.
Crane Co.
Creamery Package Mfg. Co.
G and H Products Corp.
Goodrich Industrial Products Co., B. F.
Gray Co.
Hamilton Kettles Div., Brighton Corp.
Jeffrey Mfg. Co.
Ladish Co., Tri-Clover Div.
Lunkenheimer Co.
Minneapolis-Honeywell Regulator Co.
Powell Co., William
Scott Viner Co.
U. S. Rubber Co.
Triangle Package Machry. Co.
Union Standard Equipment Co.
Wallace & Tiernan, Inc.
Woodman Co., Inc.

SECTION F
Packaging Equipment, Containers and Supplies

Adhesives, glues

Adhesive Products, Inc.
Arabol Mfg. Co.
Armour Alliance Industries
Armstrong Cork Co.
Atwood Adhesives, Inc.
Dow Corning Corp.
Du Pont de Nemours & Co., E. I.
Findley Co., F. G.
Fuller Co., H. B.
Goodrich Industrial Products Co., B. F.
Ludlow Corp.
Minnesota Mining and Mfg. Co.
Morningstar-Paisley, Inc.
National Starch and Chemical Corp.
Polymer Industries, Inc.
Swift & Co.
Union Paste Co.

Aerosol propellants

Air Reduction Div., Ohio Chemical & Surgical Equipment Co., Inc.

Bag forming, filling, sealing machines

Bartelt Engineering Co.
Bemis Bros. Bag Co.
Bridge Machine Co.
Brown Filling Machine Co.
Burt Co., F. L.
Duncan Equipment Co.
Food Equipment and Supply Co.
Food Machinery and Chem. Corp.
General Packing Equipment Co.
Hayssen Mfg. Co.
Kartridge Pak Co.
King Sales and Engineering Co.
Marathon Corp.
Minnesota Mining and Mfg. Co.
Package Machinery Co.
Pak-Rapid, Inc.
Richardson Scale Co.
Schjeldahl Co.
Stokes Corp., F. J.

Bags and pouches, printed film, foil, etc.

Bemis Bros. Bag Co.
Central States Paper & Bag Co.
Chicago Transparent Bag Co.
Continental Can Co.
Cromwell Paper Co.
Crown Zellerbach Corp.
Dixie Wax Paper Co.
Dobeckmun Co. Div., Dow Chemical Co.
Kartridg Pak Co.
Kennedy Car Liner Bag Co., Inc.
Marathon, Div. American Can Co.
Milprint, Inc.
Owens-Illinois Glass Co.
Pacific Coast Foil Co.
Pollock Paper Co.
Reynolds Metals Co.
Rochester Lithographic Mfg. Co.
Visking Co.

Banding machines

Burton Machine Corp., John
Economic Machinery Co.
Gisholt Machine Co.
Minnesota Mining and Mfg. Co.
Union Standard Equipment Co.
U.S. Steel Corp.

Boxes and cartons, miscellaneous

Container Corp. of America
Continental Can Co.
Cornell Paperboard Products Co.
Crown Zellerbach Corp.
Fibreboard Paper Products Corp.
Freund Can Co.
Gaylord Container Corp., Div., Crown Zellerbach Corp.
General Box Co.
Hinde and Dauch, Div., West Virginia Pulp and Paper
Hoerner Boxes, Inc.
Lewis, G. B.
Lily-Tulip Cup Corp.
Marathon, Div. American Can Co.
Mead Packaging Div. of Mead Corp.
Old Dominion Box Co.
Owens-Illinois Glass Co.
Packaging Corp. of America
Plastomatic Corp.
Pollock Paper Co.
Quality Litho Div., Riegel Paper Corp.
Schmidt Litho Co.
Sefton Fibre Can Div.
Stecher-Traung Litho Corp.
Stone Container Corp.
West Virginia Pulp & Paper Co.

Can closing and sealing machines

American Can Co.
Angelus Sanitary Can Machine Co.
Brewers & Bottlers Equipment Corp.
Callahan Can Machine Co.
Continental Can Co.
Dewey & Almy Chemical Div., W. R. Grace & Co.
Eyrle Company
Kartridg Pak Co.

What's the Address? Turn to alphabetical listings beginning on Page 42.

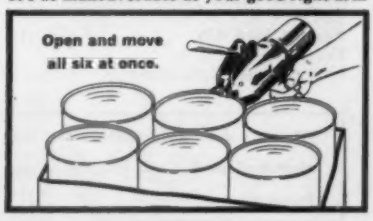
HOW MANY CANS DO YOU OPEN A DAY?

DO A BETTER JOB FASTER

The new Edlund Portable will open 500-750 cans per hour for you, depending upon your production set-up, leaving smooth edges on every can.

THE ONLY *REALLY* PORTABLE ELECTRIC OPENER

This opener requires no table-attached base. It's as maneuverable as your good right arm and operates with complete efficiency in any production set-up... single can, assembly line, or cans in the case.



STOP MOVING HEAVY CANS!

Just move the Edlund Electric from can to can. It weighs less than a #10 can and is perfectly balanced for easy handling. The pistol grip with trigger on/off switch gives you absolute cutting control.

PAYS FOR ITSELF IN SHORT ORDER

In large or small volume, the Edlund Portable's speed and durability will save you enough time and money to pay its cost many times over. It is simple to clean because you can really "get at" all cutting parts. It works as well on a sardine can as on a #10 can and, in actual kitchen tests, has opened hundreds of thousands of cans and still performs perfectly.

CHECK THESE VERY VITAL STATISTICS

The new Edlund Portable Electric Can Opener has an AC-DC Universal Heavy Duty Motor, is UL approved with 3-prong ground wire safety plug. The motor housing, opener assembly and handle are die-cast aluminum for maximum strength with minimum weight. Both cutting wheel and gear are of hardened tool steel to assure smooth cutting and long wear. Magnet (optional) eliminates "fishing" for lids. Equipped with hang-up bracket, this opener stores out of the way. Provision is also made for permanent installation, if desired.

Available from Edlund Dealers everywhere.

Edlund
Burlington, Vermont

Equigment/Supplies Index

SECTION F
Packaging Equipment, Containers and Supplies

King Sales and Engineering Co.
National Can Corp.
Resina Auto Machry. Co.
Union Standard Equipment Co.

Can lines, conveyors—controls

Ace Specialty Mfg. Co.
Peco Corp.

Can making machines

Angelus Sanitary Can Machine Co.
Baldwin Lima Hamilton Corporation
Bliss Co., E. W.
Borden Co.
Callahan Can Machine Co.
Crown Cork & Seal Co., Inc.
Durant Mfg. Co.
Heekin Can Co.
United Can Div., Hunt Foods Industries

Can unscramblers, dumpers, unloaders

ABC Packing Machine Corp.
Albertoli, John
American Can Co.
Atkron, Inc.
Barker Co.
Barnes Co., W. F. and John
Brewers & Bottlers Equipment Corp.
Buschman Co., E. W.
Busse Bros.
Chisholm-Ryder Co., Inc.
Continental Can Co.
Crompton & Knowles Packaging Corp.
Cuyler Corp., Otto W.
Dudley Machinery Corp.
Dunkley Co.
Economic Machinery Co.
Emhart Mfg. Co.
Island Equipment Corp.
Kartridg Pak Co.
Key Equipment Co.
Radio Corp. of America, Industrial Products
Robins and Co., Inc., A. K.
Shuttleworth Inc.
United Can Div., Hunt Foods Industries
Weigh Right Auto. Scale Co.

Cans, conventional — tin/steel, aluminum

American Can Co.
Borden Co.
Carnation Co., Can Div.
Continental Can Co.
Crown Cork & Seal Co., Inc.
Heekin Can Co.
National Can Corp.
Stern Can Co.
United Can Div., Hunt Foods Industries
Western Can Co.

Cans, lithographed

American Can Co.
Crown Cork & Seal Co., Inc.
Continental Can Co.
Heekin Can Co.
National Can Corp.
Sefton Fibre Can Co., Div., Container Corp. of America
Stern Can Co.
United Can Div., Hunt Foods Industries

Carton forming, closing machines

Bartelt Engineering Co.
Container Corp. of America
Crompton & Knowles Packaging Corp.
Diagraph-Bradley Ind., Inc.
Emhart Mfg. Co.
Ferguson Co., J. L.
Food Machinery and Chem. Corp.
Jones & Co., Inc., R. A.
Kaiser Aluminun & Chemical Corp.
Marathon, Div. American Can Co.
Mead Packaging Div. of Mead Corp.
Old Dominion Box Co.
Package Mchry. Co.
Pneumatic Scale Corp.
Union Standard Equipment Co.
Weigh Right Automatic Scale Co.
Western Gear Corp.

Cartons, folding

Allen Cartons, Inc.
Container Corp. of America
Continental Can Co.
Cornell Paperboard Products Co.
Crocker Co., H. S.
Cromwell Paper Co.
Crown Zellerbach Corp.
Diamond National Corp.
Fibreboard Paper Products Corp.
Flintkote Co.
Hoerner Boxes, Inc.
KVP Sutherland Paper Co.
International Paper Corp.
Marathon, Div. American Can Co.
Mead Packaging Div. of Mead Corp.
Milprint, Inc.
Old Dominion Box Co., Inc.
Owens-Illinois Glass Co.
Pacific Coast Foil Co.
Packaging Corp. of America
Pollock Paper Co.
Pneumatic Scale Corp.
Quality Litho Div. of Riegel Paper Corp.
Rossotti Lithograph Corp.
Schmidt Litho Co.
Stecher-Traung Litho Corp.
Stone Container Corp.
U.S. Printing and Litho Adv. and Mkt. Service
West Virginia Pulp & Paper Co.
Weyerhaeuser Co., Boxboard & Folding Carton Div.

Cartons, laminated

Allen Cartons, Inc.
Container Corp. of America
Continental Can Co.
Cornell Paperboard Products Co.
Cromwell Paper Co.
Crown Zellerbach Corp.
Fibreboard Paper Products Corp.
KVP Sutherland Paper Co.
Marathon, Div. American Can Co.
Milprint, Inc.
Old Dominion Box Co., Inc.
Pacific Coast Foil Co.
Packaging Corp. of America
Rossotti Lithograph Corp.
Stone Container Corp.
U.S. Printing and Litho Adv. and Mkt. Service
Weyerhaeuser Co., Boxboard & Folding Carton Div.

Cartons, waxed

Allen Cartons, Inc.
American Can Co.
Container Corp. of America
Continental Can Co.
Cornell Paperboard Products Co.
Crown Zellerbach Corp.
Diamond National Corp.
Fibreboard Paper Products Corp.
Flintkote Co.
Hoerner Boxes, Inc.
KVP Sutherland Paper Co.
Marathon, Div. American Can Co.
Mead Packaging Div. of Mead Corp.
Milprint, Inc.
Packaging Corp. of America
Pollock Paper Co.
Quality Litho Div. of Riegel Paper Corp.
Rossotti Lithograph Corp.
Schmidt Litho Co.
Stone Container Corp.
U.S. Printing and Litho Adv. and Mkt. Service
West Virginia Pulp & Paper Co.
Weyerhaeuser Co., Boxboard & Folding Carton Div.

Cases, shipping

American Box Corp.
Cascade Container Corp.
Container Corp. of America
Continental Can Co.
Cornell Paperboard Products Co.
Cromwell Paper Co.
Fibreboard Paper Products Corp.
Flintkote Co.
Gaylord Container Corp., Div., Crown Zellerbach Corp.
Hinde and Dauch, Div., West Virginia Pulp and Paper
Hoerner Boxes, Inc.
Inland Container Corp.
International Paper Corp.
Longview Fibre Co.
Maxwell Bros. Inc.
Owens-Illinois Glass Co.
Packaging Corp. of America
Schmidt Litho Co.
Stone Container Corp.
Union Bag—Camp Paper Corp.
West Virginia Pulp & Paper Co.
Weyerhaeuser Co., Boxboard & Folding Carton Div.

Case packers

ABC Packing Machine Corp.
Atkron, Inc.
Barnes Co., W. F. and John
Brewers & Bottlers Equipment Corp.
Burt Machine Co.
Chisholm-Ryder Co. of Penna.
Container Corp. of America
Crompton & Knowles Packaging Corp.
Cuyler Corp., Otto W.
Dudley Machinery Corp.
Economic Machinery Co.
Emhart Mfg. Co.
Ferguson Co., J. L.
Food Machinery and Chem. Corp.
Jones & Co., Inc., R. A.
King Sales and Engraving Co.
Old Dominion Box Co., Inc.
Schroeder Machine Corp.
Shuttleworth Inc.
Union Standard Equipment Co.
Weber Co., Inc., H. G.

Case printers

Algene Marking Equipment Co.
Bell-Mark Corp.
Cuyler Corp., Otto W.
Diagraph-Bradley Ind., Inc.
Elliott Mfg. Co., Inc.
Emhart Mfg. Co.
Ferguson Co., J. L.
Gottscho, Adolph, Inc.

What's the Address? Turn to alphabetical listings beginning on Page 42.

Industrial Marking Equipment Co.
Kiwi Coders Corp.
Markem Machine Co.
Matthews & Co., Jas. H.

Case sealers

ABC Packing Machine Corp.
Brewers & Bottlers Equipment Corp.
Chisholm-Ryder Co. of Penna.
Crompton & Knowles Packaging Corp.
Cuyler Corp., Otto W.
Elliott Mfg. Co., Inc.
Emhart Mfg. Co.
Ferguson Co., J. L.
Food Machinery and Chem. Corp.
General Corrugated Machy. Co.
National Equipment Corp.
Schroeder Machine Corp.
Union Standard Equipment Co.
Weber Co., Inc., H. G.

Case stitchers

Acme Steel Co.
Diagraph-Bradley Ind., Inc.
International Staple and Machine Co.

Cellulose bands

American Viscose Corp.
Armstrong Cork Co.
Dennison Mfg. Co.
Du Pont de Nemours & Co., E. I.
Thatcher Glass Mfg. Co., Inc.

Cleaning machines—glass or tin

Biner Ellison Machinery Co.
Chisholm-Ryder Co., Inc.
Duncan Equipment Co.
Eyrle Co.
Food Equipment and Supply Co.
Kiefer Machine Co.
Machinery Service Co., Inc.
Pneumatic Scale Corp.
U.S. Bottlers Mchry. Co.
White Cap Co.

Closure liners

Armstrong Cork Co.
Crown Cork & Seal Co., Inc.
Dewey & Almy Chemical Div., W. R. Grace & Co.
Ludlow Corp.
Milprint, Inc.
Owens-Illinois Glass Co.
Pacific Coast Foil Co.

Closures—crown

Armstrong Cork Co.
Continental Can Co.
Crown Cork & Seal Co.

Closures—lug or screw

Aluminum Co. of America
American Can Co.
Anchor Hocking Glass Corporation
Armstrong Cork Co.
Ball Brothers Co.
Bernardin Bottle Cap Co.
Biner Ellison Machinery Co.
Continental Can Co.
Crown Cork & Seal Co., Inc.
Northwestern Glass Co.
Owens-Illinois Glass Co.
Phoenix Metal Cap Co.
White Cap Co.

Closures—molded plastic

American Can Co.
Anchor Hocking Glass Corp.
Armstrong Cork Co.
Biner Ellison Machinery Co.
Owens-Illinois Glass Co.
Phoenix Metal Cap Co.
Thatcher Glass Mfg. Co., Inc.

NOW YOU CAN PACKAGE

PREMIUM BEANS

FAR CLEANER,
smoother, more polished, with fewer splits
THAN U. S. NO. 1 GRADING DEMANDS

...faster,
easier,
at lower costs
with a WARSCO
WONDER
CLEANER

WE'LL *SHOW* YOU

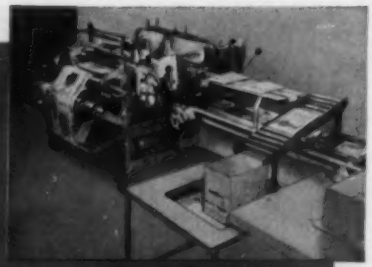
...with an actual demonstration...how the new *Warsco* is setting new standards for bean grading; how it processes beans far cleaner than U.S. No. 1 Grade specifications demand; how it can do the job faster, easier and at lower cost than ever before; how it can enable you to package premium beans at premium prices and profits! Sales-building package label available to users.

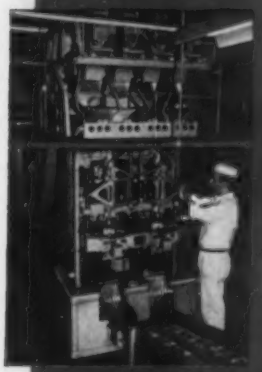
VALUABLE BOOKLET *FREE!*

Shows and explains all the fabulous features of the new Warsco Bean Cleaner...how it cleans all types and sizes of beans at the rate of 2,000 to 3,000 pounds per hour, 24 hours per day, 7 days per week, with practically no attention... how the cleaner beans actually look smoother and more polished. Write for your free copy today; no obligation.

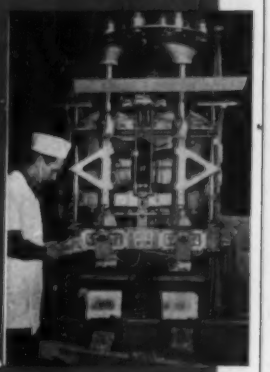
WARSCO DIVISION

W. A. RICE COMPANY—Jerseyville, Illinois





HAYSSEN HAS THE ANSWER TO YOUR PACKAGING PROBLEM!



● Whatever your product, whatever your packaging problem, there's surely a machine in the long and versatile Hayssen line to satisfy your need. If not, we'll build one that will; and, we'll save you money, too!

Whether you require wrapping, bundling, banding, bagging or flexible packaging, Hayssen machines will do it better, run longer with less maintenance, are more versatile and efficient. They're *First* in *Automatic Packaging*.

Let our experienced packaging engineers help you with your packaging problems. Contact us TODAY!

HAYSSEN

MANUFACTURING COMPANY • DEPT. CP-110 • SHEBOYGAN, WISCONSIN

Offices in principal cities. Check your phone directory.

Atlanta • Boston • Chicago • Columbus • Dallas • Denver • Detroit • Evansville, Ind. • Jackson, Miss. Kansas City • Minneapolis • New York • Philadelphia • St. Louis • San Francisco • Montreal • Toronto Vancouver

Closures—vacuum

Aluminum Co. of America
Anchor Hocking Glass Corp.
Bernardin Bottle Cap Co.
Crown Cork & Seal Co.
Owens-Illinois Glass Co.
White Cap Co.

Code dating equipment

Bell-Mark Corp.
Brewers & Bottlers Equipment Corp.
Crompton & Knowles Packaging Corp.
Ferguson Co., J. L.
Gottscho, Inc., Adolph
Griffin-Rutgers, Inc.
Industrial Marking Equipment Co.
Kiwi Coders Corp.
Markem Machine Co.
Matthews & Co., J. H.
Old Dominion Box Co., Inc.
Shubert Co., H. A.
White Cap Co.

Counters—can, bottle

Durant Mfg. Co.
Kiwi Coders Corp.
Lumenite Electronc Co.
Peco Corp.
Veeder Root Co.

Drums, fibre

Continental Can Co.

Drums, metal

Continental Can Co.
Republic Steel Corp.
Rheem Mfg. Co.
United States Rubber Co.
U.S. Steel Corp.

Films, transparent

American Viscose Corp.
Celanese Corp. of America
Central States Paper & Bag Co.
Chicago Transparent Bag Co.
Continental Can Co.
Crown Zellerbach Corp.
Dixie Wax Paper Co.
Dobeckmun Co. Div.
Dow Chemical Co.
Du Pont de Nemours & Co., E. I.
Goodrich Industrial Products Co., B. F.
Goodyear Tire & Rubber Co.
Ludlow Corp.
Marathon Corp.
Milprint, Inc.
Minnesota Mining and Mfg. Co.
Mono-Sol Corp.
Olin-Mathieson Chem. Corp.
Pollock Paper Co.
Spencer Chemical Co.
Visking Co., Div. of Union Carbide Corp.

Foil crimping and closing machines

Kaiser Aluminum & Chemical Corp.
Reynolds Metals Co.
Scandia Packaging Machinery Co.

Foil labels, wraps, etc.

Aluminum Co. of America
American Can Co.
Anaconda Aluminum Co.
Chicago Transparent Bag Co.
Continental Can Co.
Crown Zellerbach Corp.
Dennison Mfg. Co.
Dobeckmun Co. Div.
Ekco-Alcoa Containers, Inc.
Gamse Litho Co.

Ludlow Corp.
Lustour Corp.
Marathon Corp.
Milprint, Inc.
Pacific Coast Foil Co.
Pollock Paper Co.
Reynolds Metals Co.
Riegel Paper Corp.
Rochester Lithographic Mfg. Co.
Strawberry Hill Press, Inc.

Foil containers, rigid

Aluminum Co. of America
Anaconda Aluminum Co.
Chicago Metallic Mfg. Co.
Ekco-Alcoa Containers, Inc.
Kaiser Alum. & Chem. Corp.
Old Dominion Box Co., Inc.
Reynolds Metals Co.

Glass closing and sealing machines

Aluminum Co. of America
Anchor Hocking Glass Corp.
Consolidated Packaging Machinery Corp.
Crown Cork & Seal Co.
Dewey & Almy Chemical Co. Div., W. R. Grace Co.
Eyrle Company
Pneumatic Scale Corp.
Resina Auto Machry. Co.
White Cap Co.

Glass unscramblers, dumpers, unloaders

ABC Packing Machine Corp.
Atkron, Inc.
Barnes Co., W. F. and John
Horix Manufacturing Co.
Island Equipment Corp.
Radio Corp. of America
Solbern Mfg. Co.
Weigh Right Auto. Scale Co.
White Cap Co.

Glass containers

Anchor Hocking Glass Corp.
Armstrong Cork Co.
Ball Brothers Co.
Brockway Glass Co., Inc.
Continental Can Co.
Fairmont Glass Works, Inc.
Filler Machine Co.
Foster Forbes Glass Co.
Glass Containers Corp.
Glenshaw Glass Co.
Kerr & Co., Alex. H.
Knox Glass Co.
Latchford Glass Co.
Metro Glass Div.
Northwestern Glass Co.
Owens-Illinois Glass Co.
Pierce Glass Co.
Thatcher Glass Mfg. Co., Inc.

Heat sealers, film, foil, etc.

Bemis Bros. Bag Co.
Brown Filling Machine Co.
Chicago Transparent Bag Co.
Dennison Mfg. Co.
Schjeldahl Co.
Union Standard Equipment Co.

What's the Address? Turn to alphabetical listings beginning on Page 49.

Labelers, can

Allen Machinery & Equipment Co.
Biner Ellison Machinery Co.
Burt Machine Co.
Chisholm-Ryder Co. of Pa.
Crompton & Knowles Packaging Corp.
Cuyler Corp., Otto W.
Diagraph-Bradley Ind., Inc.
Emhart Mfg. Co.
Food Machinery and Chem. Corp.
MRM Co.
Potdevin Machine Co.
Union Standard Equipment Co.

Labelers, glass

Allen Machinery and Equipment Co.
Biner-Ellison Machinery Co.
Brewers & Bottlers Equipment Corp.
Burt Machine Co.
Chisholm-Ryder Co. of Penna.
Crompton & Knowles Packaging Corp.
Diagraph-Bradley Ind., Inc.
Economic Machinery Co.
Elliott Mfg. Co., Inc.
Emhart Mfg. Co.
Food Machinery and Chem. Corp.
MRM Co.
New Jersey Machine Corp.
Pneumatic Scale Corp.
Potdevin Machine Co.

Labels, can and glass

Brady Co., W. H.
Carlisle and Co., A.
Chisholm-Ryder Co. of Penna.
Continental Can Co.
Crocker Co., Inc., H. S.
Dennison Mfg. Co.
Gamse Litho Co.
Lustour Corp.
Michigan Lithographing Co.
Milprint, Inc.
Muirson Label Company, Inc.
Pacific Coast Foil Co.
Piedmont Label Co.
Rochester Lithographic Mfg. Co.
Roesch Co., Louis
Rossotti Lithograph Corp.
Schmidt Litho Co.
Security Lithograph Co., Label Div.
Stecher-Traung Litho Corp.
Strawberry Hill Press, Inc.
U.S. Printing and Litho Adv. and Mkt. Service
West Virginia Pulp & Paper Co.
Western Litho Co.

Marking equipment

Algene Marking Equipment Co.
Barkley & Dexter Labs, Inc.
Bell-Mark Corp.
Blaisdell Pencil Co.
Brady Co., W. H.
Crompton & Knowles Packaging Corp.
Diagraph-Bradley Ind., Inc.
Ferguson Co., J. L.
Gottscho Inc., Adolph
Griffin-Rutgers, Inc.
Kiwi Coders Corp.
Industrial Marking Equipment Co.
Markem Machine Co.
Marsh Stencil Machine Co.
Matthews & Co., J. H.

Multiple packs

Container Corp. of America
Continental Can Co.
Cornell Paperboard Products Co.
Ferguson Co., J. L.
Fibreboard Paper Products Corp.
Gardner Div., Diamond National Corp.
Packaging Div., Mead Corp.

SECTION F
Packaging Equipment, Containers and Supplies

Old Dominion Box Co., Inc.
Rossotti Lithograph Corp.
Union Standard Equipment Co.
U.S. Printing and Litho Adv. and Mkt. Service

Overwraps, carton and box

American Viscose Corp.
Battle Creek Packaging Machines, Inc.
Continental Can Co.
Crocker Co., Inc., H. S.
Cromwell Paper Co.
Crown Zellerbach Corp.
Dixie Wax Paper Co.
Dobeckmun Co. Div.
Gamse Litho Co.
International Paper Corp.
KVP Sutherland Paper Co.
Ludlow Corp.
Lustour Corp.
Marathon Div., American Can Co.
Milprint, Inc.
Muirson Label Company, Inc.
Pacific Coast Foil Co.
Pollock Paper Co.
Reynolds Metals Co.
Riegel Paper Corp.
Rochester Lithographic Mfg. Co.
Rossotti Lithograph Corp.
Schmidt Litho Co.
Standard Packaging Corp.
Union Standard Equipment Co.
U.S. Printing and Litho Adv. and Mkt. Service
West Virginia Pulp & Paper Co.
Western Litho. Co.

Palletizers, depalletizers

Alvey Conveyor Mfg. Co.
American Can Co.
Barry-Wehmiller Machinery Co.
Benner-Nawman, Inc.
Brewers & Bottlers Equipment Corp.
Busse Bros.
Carrie Machinery Co.
Continental Can Co.
Crompton & Knowles Packaging Corp.
Dudley Machinery Corp.
Food Machinery and Chem. Corp.
Key Equipment Co.
Mathews Conveyor Co.

Scales, automatic weighing

Bartelt Engineering Co.
Bemis Bros. Bag Co.
Champion Paper and Fibre Co.
Consolidated Packaging Machinery Corp.
Cromwell Paper Co.
Eagle Machinery Co., Ltd.
Exact Weight Scale Co.
Fairbanks, Morse & Co.
Food Machinery and Chem. Corp.
Howe Scale Co.
Illumitronic Engineering
International Paper Corp.
Pennsylvania Scale Co.
Pneumatic Scale Corp.
Richardson Scale Co.
Riegel Paper Corp.
Toledo Scale Co.
Union Standard Equipment Co.
Wallace and Tiernan, Inc.
Weigh Right Auto. Scale Co.
West Virginia Pulp & Paper Co.
Woodman Co., Inc.

The Perfect Container doesn't Just Happen!

WHEN Mother Nature created the turtle, she gave him a comfortable house to live in. Mr. Turtle's portable, protective covering illustrates a container that does what it's supposed to do . . . best!

Canco's policy . . . packages that move!

In the food field, Canco creates the containers that do what they are supposed to do . . . best. From design, to store shelves, to pantry shelves, Canco develops packages that project themselves into sales . . . cans for fruits, vegetables, meats, fish, beverages and many specialties. A complete packaging policy explains why the best containers come first from Canco.

To help boost your sales and profits, put Canco's aggressive team of research, manufacturing, and marketing experts to work for your products.

GREAT CONTAINER IDEAS COME FROM CANCO

CANCO DIVISION
AMERICAN CAN COMPANY

Stitching, strapping and stapling, equipment and supplies
Acme Steel Co.
Container Stapling Corp.
Diagraph-Bradley Ind., Inc.
International Staple and Machine Co.
Signode Steel Strapping Co.
U.S. Steel Corp.
Woodman Co., Inc.

Tape, tape dispensers
Adhesive Products, Inc.
Bemis Bros. Bag Co.
Brady Co., W. H.
Central State Paper & Bag Co.
Diagraph-Bradley Ind., Inc.
Emhart Mfg. Co.
Ludlow Corp.
Marsh Stencil Machine Co.
Minnesota Mining and Mfg. Co.
Nashua Corp.

Tin plate
Bethlehem Steel Co.
Granite City Steel Co.
Inland Steel Co.
Jones & Laughlin Steel Corp.
Kaiser Steel Corp.
National Steel Corp.
Wheeling Steel Corp.
Youngstown Sheet and Tube Co.

Wrapping machines
Anderson Bros. Mfg. Co.
Battle Creek Packaging Machines, Inc.
Crompton & Knowles Packaging Corp.
Elgin Mfg. Co.
Emhart Mfg. Co.
Food Machinery and Chem. Corp.
Hayssen Mfg. Co.
Oliver Machinery Co.
Package Machinery Co.

SECTION G
Control and Laboratory Equipment, Instruments, Supplies

Autoclaves
Dennison Mfg. Co.
Dundon Iron Works
Groen Mfg. Co.
Krenz Inc., Oscar
Pfaudler Permutit Inc.
Precision Scientific Co.
Robins and Co., Inc., A. K.
Wilkens-Anderson Co.
Wilmot Castle Co.

Can testing equipment
American Can Co.
Bliss Co., E. W.
Borden Co.
Food Machinery and Chem. Corp.
Taylor Instrument Co.
Wilkens-Anderson Co.

Color instruments
American Optical Co.
Barkley & Dexter Labs, Inc.
Bausch & Lomb Optical Co.
Beckman Instruments, Inc.
Macbeth Corp.
Magnuson Engineers
Wilkens-Anderson Co.

Consistency instruments
Fischer & Porter Co.
Food Machinery and Chem. Corp.
L.E.E. Inc.
Taylor Instrument Companies
United Co., The

Distilling apparatus
Barnstead Still and Sterilizer Co.
Groen Mfg. Co.
Krenz Inc., Oscar
Pfaudler Permutit Inc.
Precision Scientific Co.
Stokes Corp., F. J.
Wilkens-Anderson Co.

Filters, laboratory
Alsop Engineering Corp.
Corning Glass Works
Groen Mfg. Co.
Tennis-Consolidated Industries
United Co., The

Glassware, laboratory
Armstrong Cork Co.
Corning Glass Works
Fischer & Porter Co.
Tennis-Consolidated Industries
Wilkens-Anderson Co.

Headspace, container-fill gauges Hydrometers
Fischer & Porter Co.
Food Machinery and Chem. Corp.
Taylor Instrument Companies
Tennis-Consolidated Industries
Wilkens-Anderson Co.

Incubators, bacteriological
Precision Scientific Co.
Wilkens-Anderson Co.

Indicators, cooking, freezing
Aseptic-Thermo Indicator Co.
Easterday Paint & Chem. Co.

Instruments, laboratory
American Optical Co.
Bausch & Lomb Optical Co.
Beckman Instruments, Inc.
Daystrom, Inc.
Industrial Instruments, Inc.
Infilco, Inc.
L.E.E. Inc.
Leeds and Northrup Co.
Lumenite Electronic Co.
Minneapolis-Honeywell Regulator Co.
Precision Scientific Co.
Taylor Instrument Companies
United Co., The
Wallace and Tiernan, Inc.

Instruments, time, temperature, flow, level—recording, indicating, controlling
American Optical Co.
Aseptic-Thermo Indicator Co.
B-I-F Industries, Inc.
Barkley & Dexter Labs, Inc.
Bristol Co.
Buffalo Meter Company, Inc.
Daystrom, Inc.
Electric Auto-Lite Co.
Electro Mechanisms Inc.
Fenwal Inc.
Fischer & Porter Co.
Foxboro Co.
Industrial Instruments, Inc.
Industrial Nucleonics Corp.
L.E.E. Inc.
Langsenkamp Co., F. H.
Leeds and Northrup Co.
Logeman Co., C. W.
Lumenit Electronic Co.
Minneapolis-Honeywell Regulator Co.
Peerless Equipment Co.
Powers Regulator Co.
Richardson Scale Co.
Scientific Instrument Co.
Stephens-Adamson Mfg. Co.
Taylor Instrument Companies
Wallace and Tiernan, Inc.
Warrick Co., Charles F.
Wilkens-Anderson Co.

Meters, pH
Beckman Instruments, Inc.
Bristol Co.
Buffalo Meter Company, Inc.
Foxboro Co.
Leeds and Northrup Co.
Macbeth Corp.
Precision Scientific Co.
Taylor Instrument Companies
Tennis-Consolidated Industries
Wilkens-Anderson Co.

Microscopes
American Optical Co.
Bausch & Lomb Optical Co.
Radio Corp. of America
Wilkens-Anderson Co.
Zeiss, Inc., Carl

Mixers and mills, laboratory
Alsop Engineering Corp.
Day Co. Div., J. H.; Cleveland Automatic Machine Co.
Groen Mfg. Co.
Metal-Glass Products Co.
Mixing Equip. Co., Inc.
Southwestern Engineering Co.
Stokes Corp., F. J.
Sturtevant Mill Co.
Tennis-Consolidated Industries
Union Standard Equipment Co.
U.S. Stoneware Co., Plastics & Synthetics Div.
Wilkens-Anderson Co.

Mold count equipment
American Optical Co.
Bausch & Lomb Optical Co.

Reagents
Du Pont de Nemours & Co., E. I.
Wilkens-Anderson Co.

Refractometers
American Optical Co.
Bausch & Lomb Optical Co.
Minneapolis-Honeywell Regulator Co.
Wilkens-Anderson Co.
Zeiss, Inc., Carl

Saccharimeters
Bausch & Lomb Optical Co.
Minneapolis-Honeywell Regulator Co.
Taylor Instrument Companies
Wilkens-Anderson Co.

Scales, drained weight
Exact Weight Scale Co.
Fairbanks, Morse & Co.

Want More Information?

Do you want more information on any of the winners of a Canner/Packer Gold Medal Award?

Or any of the bulletins listed in the classified directory of bulletins?

Simply circle the number of the item (1 to 33 for the Gold Medal Awards and 100 to 209 for bulletins, brochures and catalogues.)

Canner/Packer will have the manufacturer or supplier send the information or the catalogue to you.

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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
19	20	21	22	23	24	25	26	27	28	29	30	31	33		100	101	102
103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138
139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156
157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174
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121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138
139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156
157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174
175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192
193	194	195	196	197	198	199	201	202	203	204	206	207	208	209			

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121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138
139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156
157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174
175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192
193	194	195	196	197	198	199	201	202	203	204	206	207	208	209			

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Canner/Packer will have the manufacturer or supplier send the information or the catalogue to you.

Pennsylvania Scale Co.
Toledo Scale Co.
United Co., The

Specific gravity equipment

Bristol Co.
Fischer & Porter Co.
Foxboro Co.
Industrial Nucleonics Corp.

Thermometers, center temperature measurement instruments

Bristol Co.
Daystrom, Inc.
Fenwal Inc.
Foxboro Co.
Minneapolis-Honeywell Regulator Co.
Palmer Thermometers, Inc.
Precision Scientific Co.
Taylor Instrument Companies

Texture Meters

Bridge Machine Co.
Wilkens-Anderson Co.

Vacuum gauges

Foxboro Co.
Stokes Corp., F. J.
Taylor Instrument Companies
Wallace & Tiernan Inc.
Wilkens-Anderson Co.

Viscosity instruments

Bristol Co.
Fischer & Porter Co.
Food Machinery and Chem. Corp.
Foxboro Co.
Precision Scientific Co.
Wilkens-Anderson Co.

Water testing equipment

Barnstead Still & Sterilizer Co.
Industrial Instruments, Inc.
Klenzade Products, Inc.
Tennis-Consolidated Industries
Wallace and Tiernan, Inc.
Wilkens-Anderson Co.

SECTION H
Special Services

Engineering consultants

Baldwin-Lima-Hamilton Corp.
Barkley & Dexter Labs, Inc.
Belt-Ice Corp.
Bemis Bros. Bag Co.
Benner-Nawman, Inc.
Dudley Machinery Corp.
Fernholtz Machinery Co.
Fibreboard Paper Products Corp.
Food Machinery and Chem. Corp.
Groen Mfg. Co.
Key Equipment Co.
Krenz Inc., Oscar
Leeds and Northrup Co.
Longview Fibre Co.
Minnesota Mining and Mfg. Co.
Republic Steel Corp.

Field warehousing

American Express Field Warehousing Corp.
C. I. T. Corp.
Douglas-Guardian Warehouse Corp.
Haslett Warehouse Co.
Lawrence Warehouse Co.
New York Terminal Warehouse Co.
St. Louis Terminal Field Warehouse Co.
U.S. Steel Corp.

Financing

American Express Field Warehousing Corp.
St. Louis Terminal Field Warehouse Co.
Universal Underwriters

Insurance

California Food Industry Insurance Co.
Manufacturers & Wholesalers Indemnity Exchange
Warner Co., L. B.

Labor

Manpower Inc.

Laboratories, consulting

Barkley & Dexter Labs, Inc.
Food and Drug Research Labs., Inc.
Mayer & Sons Co., H. J.
Rhodia Inc.
Wisconsin Alumni Research Foundation

Machinery leasing

Clark Equipment Co.
Crompton & Knowles Packaging Corp.
Cuyler Corp., Otto W.
Dudley Machinery Corp.
Fibreboard Paper Products Corp.
Food Machinery and Chem. Corp.
Gisholt Machine Co.
Key Equipment Co.
Nationwide Leasing Company
Radio Corp. of America
United Can Div., Hunt Foods Industries

Sanitation consultants

Allen Machinery and Equipment Co.
DuBois Chemicals, Inc.
Food & Drug Research Labs., Inc.
Huntington Laboratories, Inc.
Klenzade Products, Inc.
Rhodia Inc.

Transport—highway

Consolidated Freightways, Inc.
McGraw-Edison Co.
Merrifield Trucking Co.
Ohio Fruit Products Co., Inc.
Pacific Intermountain Express
Ringsby Truck Lines, Inc.

Transport—rail

McGraw-Edison Co.
North American Car Corp.
Pullman-Standard Car Mfg. Co.
Santa Fe Railway Co.

Transport—water

Isbrantsen Company, Inc.
McGraw-Edison Co.

Warehousing—refrigerated

City Products Co.
Continental Freezers of Ill., Inc.
Haslett Warehouse Co.
Merchants Refrigerating Co.
Ohio Fruit Products Co., Inc.
Quincy Market C. S. & Whse. Co.
Terminal Ice and Cold Storage Co.
Trans-American Refrigerated Svc. Ltd.
Wisconsin Cold Storage Co.

SECTION I

Contract Packers of Food Products in Aerosol Containers

Aeropak, Inc., 500 W. 41st St., Chicago 50, Ill.

Aerosol Foods Corp., 160 Washington St., North Boston, Mass.

Associated Brands, Inc., 50 Wallabout St., Brooklyn, N.Y.

G. Barr & Company, 3601 S. Racine, Chicago, Ill.

Brooks Foods, Inc., Collinsville, Ill.

Fluid Chemical Co., Inc., 878 Mt. Prospect Ave., Newark, N. J.

Morton Company, 1625 N. Highland, Memphis 8, Tenn.

New England Pharmaceutical, 2013 Outer Dr., Dearborn, Mich.

Pace, Inc., P.O. Box 206, Wilmington 99, Del.

Pennsylvania Engineering Co., 1107-21 N. Howard St., Philadelphia 23, Pa.

Peterson Filling and Packaging Co., Hegeler Lane, Danville, Ill.

Professional Products Labs., 1138 East North Ave., Baltimore 2, Md.

Protection Chemical and Aerosol Products Ltd., 5747 Souligny St., Montreal 5, Quebec

Press 'N Serve Foods, Inc., 3814 Nebraska St., St. Louis 18, Mo.

W. T. Rawleigh Co., 101 S. Liberty Ave., Freeport, Ill.

Rich Products Corp., 1145 Niagara, Buffalo, New York

Stanley Home Products Co., National Contracts Div., 116 Pleasant St., Easthampton, Mass.

Tasti Cup Coffee Corp., 30 Main St., Brooklyn 1, N.Y.

Thomasson of Pennsylvania, Inc., Washington and Ford St., Norristown, Pa.

Zenith Chemical Corp., 175 Mount Pleasant Ave., Newark, N.J.

Catalogs, Bulletins, Brochures Offered by Manufacturers

Section A—PREPARATION AND PROCESSING EQUIPMENT

Plate Freezers: Bulletin entitled "Amerio" describes double contact pressure plate freezers for manual, semi-automatic loading and unloading—Amerio Contact Plate Freezers, Inc., 280 Gorge Rd., Cliffside Park, N. J. Circle No. 101.

Automatic Filler: "Bartelt Automatic Filler" describes filler head which can be interchangeably tooled for powders, granulars, liquids or pastes. Accurate filling at production rates of 120 fills per minute and above—Bartelt Engineering Co., 1900 Harirson Ave., Rockford, Ill. Circle No. 102.

Processing Machinery: Catalog entitled "Food Processing Machinery" illustrates and describes processing machinery for all food products. Contains specifications of each machine with complete index of contents—Berlin Chapman Co., Berlin, Wis. Circle No. 103.

Filling & Labeling: "Modern Equipment for Filling & Labeling" offers photographs and brief descriptions of standard machines for filling and labeling of free flowing and viscous products—Biner Ellison Machinery Co., 1101 N. Main St., Los Angeles 12, Calif. Circle No. 104.

Inspection Lights: Bulletin describes Terriss inspection lights for installation on rear angle of conveyors for the inspection of glass containers traveling to filling machine—Terriss Div., Consolidated Siphon Supply Co., 22 Wooster St., New York 13, N. Y. Circle No. 105.

Food Freezer: Freze-Cel Catalog Section F S C illustrates and gives specifications on the selfcontained double contact packaged food freezer—a complete freezer system in one cabinet—Dole Refrigerating Co., 5910 N. Pulaski Rd., Chicago 46, Ill. Circle No. 106.

Piston Fillers: General catalogue FA-60 shows and describes various models of piston filling machines—Filler Machine Co., Inc., 10 Penn Ave., Rockledge, Philadelphia 11, Pa. Circle No. 107.

Filling Machines: 8-page folder describes the FMC auger filling machines and their inherent advantages for powder, paste and granular products—FMC Packaging Machinery Div., Stokes & Smith, 4900 Summerdale Ave., Philadelphia 24, Pa. Circle No. 108.

Filteraids: Bulletin B-14 thoroughly covers the use of diatomite filteraids. Charts, diagrams and photos illustrate principles of filtration as well as specific operating data—Dicalite Dept., Great Lakes Carbon Corp., 612 S. Flower St., Los Angeles 17, Calif. Circle No. 109.

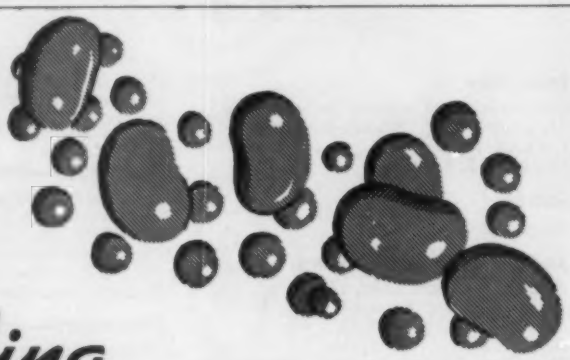
Thermal Processing: Booklet entitled "Horix Walking Beam and Roll-Thru for Thermal Processing" is the first and most complete presentation of these fine controlled-process units — Horix Manufacturing Co., 2601 Chartiers Ace., Pittsburgh 4, Pa. Circle No. 110 .

Dryers & Coolers: Bulletin No. 953 describes and pictures the Jeffrey line of vibrating drying and cooling equipment for the food industry (direct and indirect heat types)—Jeffrey Manufacturing Co., 978 N. 4th St., Columbus 16, Ohio. Circle No. 111.

Cutter, Mixer, Emulsifier: "The Koch Schnellkutter" describes how Schnellkutter does pre-cutting, fine cutting, emulsifying, and vacuum mixing in one operation in only seconds—Koch Equipment Co., 2520 Holmes St., Kansas City 8, Mo. Circle No. 112.

Metal Fabrication: 8-page brochure entitled "Metal Fabrication—Specialists in Processing Equipment for Industry" describes company background, present facilities, capabilities, and pictures equip-

Want a Bulletin? Get it the easy way—See Page 81.



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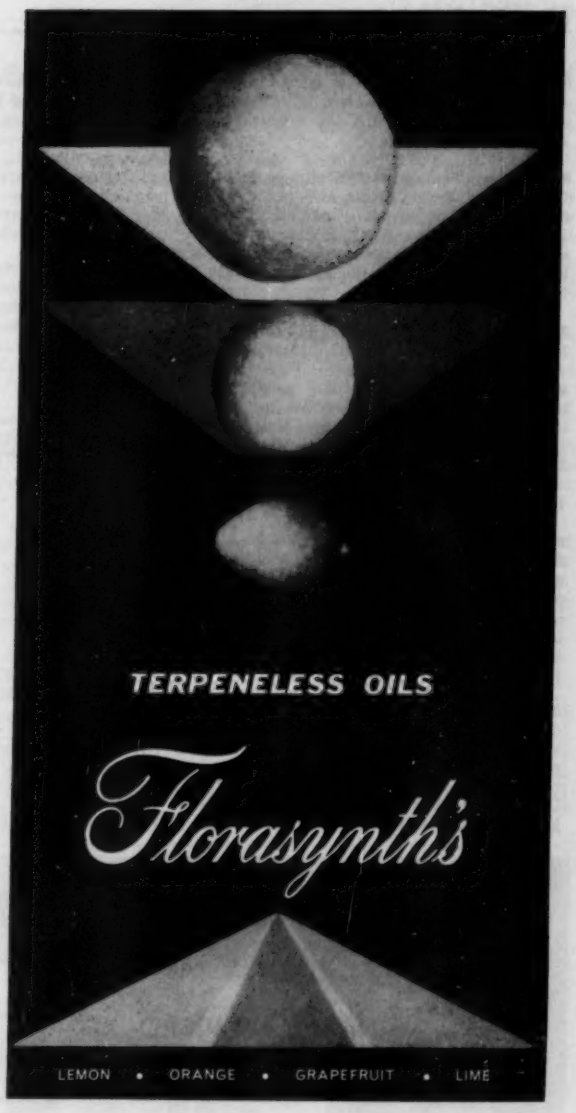

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Bulletins

ment manufactured for a wide variety of customers—Oscar Krenz Inc., Ashby at 6th St., Berkeley 10, Calif. Circle No. 113.

Processing Equipment: Mailing piece, "Big 6 For '60", depicts and points up 6 pieces of equipment displayed at the 1960 NCA convention. Reply card is included—F. H. Langsenkamp Co., 229 E. South St., Indianapolis 25, Ind. Circle No. 114.

Tumbler/Feeder: "Tumbler Feeder Bulletin" describes the new Tumbler Feeder which feeds and cleans tumblers right side up to avoid nicks, poor seeds and contamination. "Portable Filler Bulletin" describes the Portable Vacuum Filler and Cleaner for light or heavy liquid filling, for short run and test market packagers —Machinery Service Co., 214 Eiler Ave., Louisville 14, Ky. Circle No. 115.

Feeder Unit: "Shufflo Single File Feeder for Feeding Urschel Model OV Slicer" describes the new Shufflo feeder unit that provides automatic uniform feed resulting in unmatched slice quality with less labor and at increased capacity—Magnuson Engineers, Inc., 509 Emory St., San Jose 10, Calif. Circle No. 116.

Abrasive Coating: "Do-It-Yourself Kit" describes a new abrasive coating for vegetable peelers that any one can apply. Consists of abrasive, adhesive and necessary tools—Milwaukee Motive Mfg. Co., 1825 S. Kinnickinnic Ave., Milwaukee, Wis. Circle No. 117.

Heat Pump Principle: Bulletin No. 373-18 entitled "Lo-Temp Process" describes and illustrates the heat pump principle in evaporating heat sensitive foods without the use of steam. Boilers and all supporting steam-system equipment are eliminated from the plant layout—Mojonnier Bros. Co., 4603 W. Ohio St., Chicago 44, Ill. Circle No. 118.

Frost Free Refrigeration: "No-Frost Method" describes a unique, frost-free refrigeration method that improves quality with lower operating costs for fruit, vegetables — Niagara Blower Co., 405 Lexington Ave., New York 17, N. Y. Circle No. 119.

Precision Light Source: Bulletin No. UL-10A describes Ultra-Lux, the first single precision light source for critical color work—Nu-Lite Corp., 41 S. Sixth St., Newark 7, N. J. Circle No. 120.

Can Line Control: The "Peco Handbook on Can Line Automation" condenses years of practiced experience in solving can line control problems for can manufacturers and canners—Peco Corp., 111 Ortega Ave., Mountain View, Calif. Circle No. 121.

Potato Cutter: Catalog sheet entitled "Crinkle Cut Potatoes" describes a new machine for the continuous cutting of French fries with a wrinkle—F. B. Pease Co., 1450 E. Henrietta Rd., Rochester 23, N. Y. Circle No. 122.

Film Evaporator: "Pfaudler Wiped Film Evaporator" (Bulletin 991) permits low temperature distillation of heat sensitive fruit and food products—Pfaudler Permutit Inc., Pfaudler Div., 1000 West Ave., Rochester 3, N. Y. Circle No. 123.

Air Cleaning/Screw Capping/Liquid Fillers: #141—descriptive folder on air cleaning equipment; #146 — specifications and data on screw capping machines; #148—details on three series of all purpose liquid fillers—Pneumatic Scale Corp., Ltd., Quincy 71, Mass. Circle No. 124.

Blancher: Bulletin No. TL-W1 describes the Thermascrew water blanchers, giving sizes and data, and typical plant applications—Rietz Manufacturing Co., P. O. Box 847, Santa Rosa, Calif. Circle No. 125.

Screen Separators: "1960 SWECO Vibro-Screen Separator Catalog" illustrates 48", 30" and 18" diameter models, and describes principle of operation and advantages to multiple process industries —Southwestern Engineering Co., 4800 Santa Fe Ave., Los Angeles 58, Calif. Circle No. 126.

Spray Nozzles: Bulletin 102 describes a new type of hollow cone spray nozzle with a fundamentally new vortex chamber design that retards abrasive wear, and gives longer nozzle life—Spraying Systems Co., 3251 Randolph St., Bellwood, Ill. Circle No. 127.

Dry Processing: 1960 catalog — "Dry Processing Equipment"—offers information on a full line of dry processing

Put 'em on your production line—

THE All-New Scott VIBRO-LUX SEPARATING UNIT

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Variable speed from 900 to 1000 vibrations per minute! Removes water, most splits and skins, and spreads commodity evenly over the screen (ideal for use ahead of inspection table). Hickory slats absorb vibration . . . no carry-through to floor! Feed height 22", discharge height 16½". Longer legs available.

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Handles any commodity that can be elevated and conveyed in water. Accurate control of water level, feed hopper only 20½" off the floor, at the pre-mixing chamber for easy loading from low discharge units . . . Motor is high and dry and fully protected from steam and water. Choice of 3", 4", 5" and 6" pumps. Variable speed drive, stainless hopper and/or contact parts optional.

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equipment, together with photographs, flowsheets, tables and graphs—Sturtevant Mill Co., 105 Clayton St., Boston (Dorchester), Mass. Circle No. 128.

Processing Equipment: 4-page catalog folder entitled "Processing Equipment for Heat Sensitive Products" lists and describes in abbreviated form the processing equipment that is engineered and produced by—Thermovac, Inc., P.O. Box 209, Stockton, Calif. Circle No. 129.

Corn Cutter: 16-page, fully-illustrated booklet, "The C8 TUC Cutter," details how the cutter can deliver up to 1/3 more corn, and upgrade quality significantly — The United Company, TUC Road, Westminster, Md. Circle No. 130.

Cutting Equipment: "How to Cut Food Products" contains an index of food products, listing different shapes in which product can be cut. Under each shape, various machines used to cut that shape are listed—Urschel Laboratories, Inc., 2503 Calumet Rd., Valparaiso, Ind. Circle No. 131.

Blast Freezers: "Vilter Air Defrost Blast Freezers" describes this new line of freezers which are available in eight sizes, from 6300 CFM through 36,000 CFM, in vertical and horizontal models—The Vilter Manufacturing Co., 2217 S. 1st St., Milwaukee 7, Wis. Circle No. 132.

Section B—FOOD INGREDIENTS AND ADDITIVES

Citric Acid: Bulletin 601C describes Bzura Citric Acid, grades, uses, etc.—Bzura Chemical Co., Clark St., Keyport, N. J. Circle No. 133.

Flavors: 1960 catalog gives a price list of flavoring, aromatic and essential oil materials for canners and food packers. Also included is latest information as to use, quantity and effectiveness—Florasynth Laboratories, Inc., 900 Van Nest Ave., New York 62, N. Y. Circle No. 134.

Coloring Agent: "Beta Carotene—Nature's Yellow" is a five-color chart for use in classrooms to teach the value of beta carotene as a coloring agent and nutrient—Hoffman-La Roche, Inc., Nutley 10, N. J. Circle No. 135.

Acids/Enzymes: "Miles Citric Acid"—specifications, technical data, and description of where and how to use pure citric acid; "Use of Isoascorbic Acid & Sodium Isoascorbate for the Food & Beverage Industry" — product specifications and directions on applications; "Takamine Enzymes"—data sheets on various enzymes available for food canning & packing applications — Miles Chemical Co., Div. of Miles Laboratories, Inc., 1127 Myrtle St., Elkhart, Ind. Circle No. 136.

Corn Syrup: "Corn Syrup in Jams, Jellies and Preserves"—a 102-page formula-book on corn syrups and their applications in preserving; also an indexed reference book with numerous illustrative charts, typical formulas, etc.—A. E. Staley Manufacturing Co., Decatur, Ill. Circle No. 137.

Lactose: "Lactose (Pure Milk Sugar) Dairy Applications" relates how the versatile properties of Lactose improve the taste, appetite appeal and promotion possibilities of fluid milk and specialty dairy products—Western Condensing Co., Appleton, Wis. Circle No. 138.

Section C—RAW PRODUCT EQUIP. & SUPPLIES

Fly Killer: "Ortho Fly Killer," a 3-page folder, describes uses and application of the new Ortho fly killer D, in food processing plants, cider mills, etc.—California Spray-Chemical Corp., Lucas & Ortho Way, Richmond, Calif. Circle No. 139.

Fogging Machine: Brochure describes the Dyna-Fog "50", a light-weight, portable insecticide fogging machine that gives immediate results without dangerous residue for in plant or outdoor control—Curtis Automotive Devices, Inc., P.O. Box 297, Westfield, Ind. Circle No. 140.

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Range of measurements: n_D 1.3 to n_D 1.71 and sugar percentage scale 0% to 95%.
For liquids and solids by transmitted and reflected light.

Measuring surface of index prism is always at horizontal position . . . Observation telescope mounted stationary at an inclined position to carry out measurements in a relaxed posture . . . Border line of total reflection and scales are observed simultaneously in telescope . . . Measuring prism in heating mount can be easily interchanged . . . All movable parts are protected by being enclosed in the housing. Special index prisms in heating mount available for measurements from n_D 1.45 to n_D 1.85 and n_D 1.17 to 1.56 (on special order only). For highest-accuracy measurements, an Ultra-Thermostat, with different constancy of temperature ±0.005° is available as an accessory.

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New Design Quality Grader for Peas and Limas
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LOOK TO THE LEADER IN FOOD EQUIPMENT

THE BEST OF Everything

CHISHOLM-RYDER CO. INC.
Niagara Falls, New York
FOR THE FOOD PROCESSOR

Bulletins

Pyrenone: "Food Plant-Institution and Industrial Sprays"—data sheets dealing with formulation and dosages of non-toxic Pyrenone for control of insects in food plants and stored grain—Fairfield Chemicals, Food Machinery & Chemical Corp., 441 Lexington Ave., New York 17, N. Y. Circle No. 141.

Batching Systems: Automatic Batching Handbook describes specific advantages of automatic batching systems, such as lower cost, improved product quality, increased production and greater flexibility —Howe Scale Co., Rutland, Vermont. Circle No. 142.

Pea Harvester: Flyer describes the new Hume Model 25 pea harvester—a new center delivery harvester with a rod-type windrower instead of drapers—easier to open fields, reduces maintenance costs —H. D. Hume Co., Mendota, Ill. Circle No. 143.

Food Handling Container: Bulletin describes and illustrates a new food handling container — PolyLewton Stack-n-Nest Pans—with outstanding features: lightweight, strong, glass-like one-piece surface, safe stacking and nesting—G. B. Lewis Co., 426 Montgomery St., Watertown, Wis. Circle No. 144.

Seeds: "The Seed Specialist" is published monthly for the vegetable grower, bringing information regarding research, new varieties, and methods to those interested in vegetable production — Michael-Leonard Co., P.O. Box 987, Davenport, Ia. Circle No. 145.

"658" Fungicide: Technical bulletin #29, "Miller 658 Fungicide," describes the new fungicide, giving chemical and physical properties, toxicity, residual properties, etc.—Miller Chemical & Fert Corp., 3006 W. Cold Sp La., Baltimore 15, Md. Circle No. 146.

Seeds: The 1960 "Pea, Bean, Sweet Corn" is a descriptive catalogue—Rogers Brothers Co., P.O. 2188, Idaho Falls, Ida. Circle No. 147.

Pea/Bean Combine: "Green Pea and Lima Bean Combine and Accessories" is a new sales brochure covering the latest model Scott combine and accessories such as the hydraulic operated dump hopper, etc.—Scott Viner Co., 1224 Kinnear Rd., Columbus 12, Ohio. Circle No. 148.

Steel Pulley & Bin Level Control: Bulletin 159—Tellevel Bin Level Control Switches and bulletin 558—Curve Crown Welded, All Steel Pulley—feature technical and engineering data, specifications, diagrams and illustrations — Stephens - Adamson Manufacturing Co., Ridgeway Ave., Aurora, Ill. Circle No. 149.

Section D—MAINTENANCE, LUBRICATION, SANITATION EQUIPMENT AND SUPPLIES

Work Gloves: "The Work Glove Automat" describes a device for making work gloves readily available for employees, yet is under complete administrative control—Arlington Industries, Inc., 1513 N. Shore Rd., Revere 51, Mass. Circle No. 150.

Insulation: An eight-page brochure entitled "Insulations" explains physical properties and applications of Armstrong insulations for pipes, tanks, vessels and cold rooms—Armstrong Cork Co., West Liberty St., Lancaster, Pa. Circle No. 151.

Sheet Metal: 12-page bulletin (No. 35-9) entitled "Sheet Metal Specialties" gives complete description of fittings, spira-pipe, and accessories—Carrier Corp., Syracuse 1, N. Y. Circle No. 152.

Steam Generators: C-1018—Steam the Modern Way, a steam generator catalog; C-1004—More Meat Packing Profits for You, a direct mailer for the meat/food processing industry — Clayton Manufacturing Co., 449 N. Temple City Blvd., El Monte, Calif. Circle No. 153.

Magnetic Trap: Bulletin #104 describes the "Quick-Clamp" magnetic trap for removal of tramp iron from liquid and slurries, giving size, dimensions, weights, and capacities—Columbia Engineering Service Co., 4025 Sebastopol Hwy., Santa Rosa, Calif. Circle No. 154.

Demineralizer: Bulletin 5819 (Index 4.46) describes a line of "Uni-Pac" packaged demineralizers designed to satisfy the ever-growing demand for chemically pure water at reasonable cost—Cochrane Corp., 17th St. & Allegheny Ave., Philadelphia 32, Pa. Circle No. 155.

Plant Sanitation: Brochure on canning plant sanitation is a purchasing guide to equipment cleaners, peel remover, scale and stain remover, insecticides, etc.—Diversey Corp., 1820 Roscoe St., Chicago 13, Ill. Circle No. 156.

Silicone Antifoam: "ABC's of Defoaming" explains how silicone antifoam agents are reducing maintenance time and processing costs, increasing production capacity and efficiency; 'How 'Silicones Work for the CPI" is a compilation of case histories that show how numerous forms of silicones serve different phases of the chemical process industries—Dow Corning Corp., Midland, Mich. Circle No. 157.

Cleaning Materials: Booklet is concerned with sanitation facts for the canning and food industry, listing type of equipment, floors, etc., to be cleaned and how—Du-Bois Chemicals, Inc., Broadway at 7th, Cincinnati 2, Ohio. Circle No. 158.

Ice Machine: Bulletin on Krakice Makers gives a description of construction features and specification data — Kohlenberger Engineering Corp., 1600 W. Commonwealth Ave., Fullerton, Calif. Circle No. 159.

Lubrication: "Lubriplate Data Book"—32-page description of latest developments in lubrication and recommendations for all types of equipment—Lubriplate Div., Fiske Brothers Refining Co., 129 Lockwood St., Newark 5, N. J. Circle No. 160.

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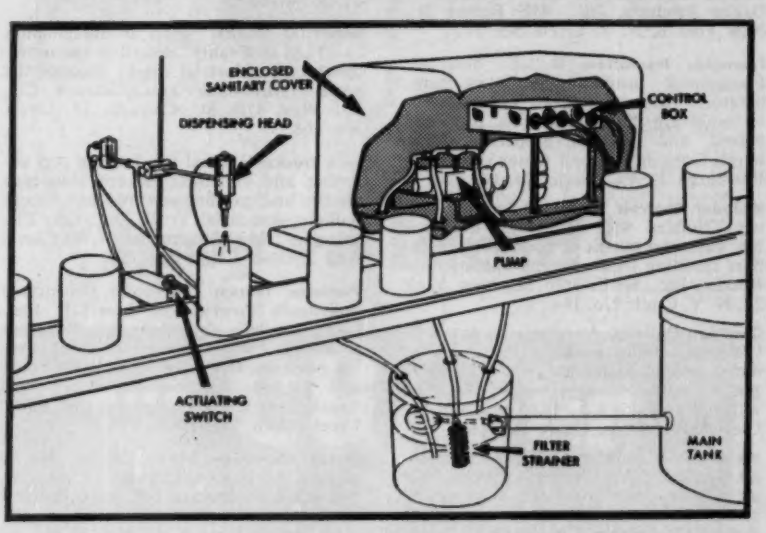

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Bulletins

Footwear: "Industrial Footwear Catalog" presents detailed information on a complete line of footwear. It is fully illustrated—B. F. Goodrich Co., Industrial Footwear Products, Watertown 72, Mass. Circle No. 161.

Abrasive Cleaner: Service bulletin 59A describes Oakite Trazon—a new abrasive cleaner that bleaches and deodorizes—Oakite Products, Inc., 44F Rector St., New York 6, N. Y. Circle No. 162.

Foamglas Insulation: Bulletin describes Foamglas® insulation for low temperature spaces (—50° F. to +50° F). Included are job photographs, problems solved, and physical properties—Pittsburgh Corning Corp., 1 Gateway Center, Pittsburgh 22, Pa. Circle No. 163.

Malodor Control: "A Guide for the Canner Troubled with Malodors" describes the ways and means of controlling malodors resulting from canning operations—Rhodia, Inc., 60 E. 56th St., New York 22, N. Y. Circle No. 164.

Coating: Bulletin describes Tropoxy #2 Clear, a coating used for the inside of metal tanks containing dry bulk foods or potable water . . . approved by the FDA—Tropical Paint Co., 1240 W. 70th St., Cleveland 2, Ohio. Circle No. 165.

Air Cleaner: Bulletin describes the Sanitair Automatic Air Cleaner—a method for air cleaning new containers that can be synchronized into packaging line—U. S. Bottlers Machinery Co., 4015 N. Rockwell St., Chicago 18, Ill. Circle No. 166.

Section E—HANDLING, CONVEYING AND POWER EQUIPMENT

Conveyor System: Bulletin describes the construction of the air chain conveyor system; its use in handling palletized materials in plant, trailer, or on dock—Alvey Conveyor Manufacturing Co., 9301 Olive Street Rd., St. Louis 22, Mo. Circle No. 167.

Industrial Trucks: "First in Imagination . . . First in Reality" describes the development of industrial trucks through the years — Automatic Transportation Co., 101 West 87th St., Chicago, Ill. Circle No. 168.

Fork Trucks: General line bulletin #59 describes and illustrates Baker's rider-type electric and gasoline-powered fork trucks —Baker Industrial Truck Div., Otis Elevator Co., 8000 Baker Ave., N.W., Cleveland 2, Ohio. Circle No. 169.

Platform Trucks: Two-color, illustrated bulletin — "Powrworker Low-Lift Platform Trucks"—describes and illustrates four operator-led, battery-powered low-lift platform trucks of 4000, 6000, 8000 and 10,000 lbs. capacity — Industrial Truck Div., Clark Equipment Co., Battle Creek, Mich. Circle No. 170.

Metal Conveyor Belts: Catalog No. 5 gives a thorough description of the various types of conveyor belts manufactured by Cyclone as well as construction details. Also included are a number of specific application illustrations—Cyclone Fence, American Steel & Wire Div., 614 Superior Ave., N. W., Cleveland 13, Ohio. Circle No. 171.

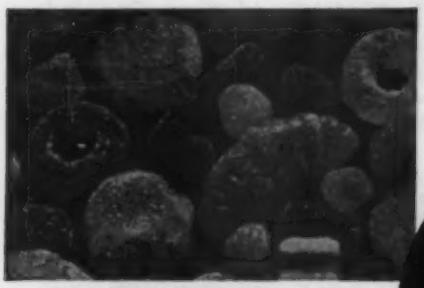
Bearings: Bulletin No. 10 describes an extensive line of mounted industrial bearings that includes sleeve and anti-friction types with tapered and spherical roller bearings, ball bearings in pillow blocks, flange units and take-ups—Dodge Manufacturing Corp., Union St., Mishawaka, Ind. Circle No. 172.

Rubber Belting: "Neoprene Rubber Belting" describes and illustrates a variety of types; "Kanry-Tex Belting" describes this new belting developed especially for conveying fruits and vegetables—Globe Woven Belting Co., Inc., 1400 Clinton St., Buffalo 6, N. Y. Circle No. 173.

Palletless Handling: Brochure entitled "Cased Goods Handling with the Cart-N-Grab" describes cost-cutting advantages of palletless handling of cased goods with Hyster lift trucks equipped with Cart-N-Grab clamp attachments—Hyster Co., P. O. Box 4318, Portland 8, Ore. Circle No. 174.

Conveyors: Two "What's New with Matthews" bulletins are concerned with specific applications of their conveyors—Matthews Conveyor Co., Ellwood City, Pa. Circle No. 175.

Boiler/Burner: Bulletin 1260 describes and illustrates Powermaster Model 3 line —includes oil and combination gas-oil models, specially designed hot water boil-



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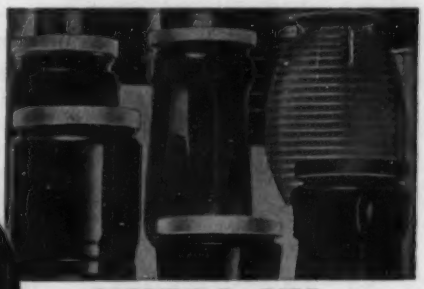

NUTRL-JEL
Regular and Slow Set
For Finest Jams, Jellies and Preserves

er, and a new steam atomizing principle for use with No. 6 oil; Bulletin 1270 describes a fuel burning system that will produce a higher guaranteed burner efficiency over a wider range than any other system—Orr & Sembower, Inc., P. O. Box 1138, Reading, Pa. Circle No. 176.

Valves: Bulletin describes a line of corrosion-resistant valves that are available in a wide selection of metals and alloys to control the flow of corrosive fluids—The Wm. Powell Co., 2525 Spring Grove Ave., Cincinnati 22, Ohio. Circle No. 177.

Handidrive: Bulletin No. 112 is a 22-page catalog which lists pre-engineered Handidrive components and systems—Standard Conveyor Co., North St. Paul 9, Minn. Circle No. 178.

Motors: Brochures available include: "Advanced Design Normal Speed Motors"; "Right Angle Gearmotors"; "Slo-Speed Motors"; "Speed-Trol, Variable Speed Drives"; "Multi-Mount Reducers" —Sterling Electric Motor, Inc., 5401 Telegraph Rd., Los Angeles 22, Calif. Circle No. 179.

Tote Bins/Tilts: Reprints 2-60, 6-60, 4-60, and 7-60. Each is an inplant discussion of how bulk handling problems were solved with the use of Tote equipment—Tote System, Inc., Beatrice, Neb. Circle No. 180.

Section F—PACKAGING EQUIPMENT, CONTAINERS & SUPPLIES

Juice Trends: Booklet entitled "Summer Servings in Urban American Homes" is an analysis of a three-year juice trend study that reveals the changing juice consumption habits of urban America—Canco Div., American Can Co., 100 Park Ave., New York 17, N. Y. Circle No. 181.

Adhesives: "How to Buy Adhesives for Better Adhesion" describes each application of an adhesive in the making, packaging, labeling, and shipping of a product—The Arabol Co., 110 East 4nd St., New York 17, N. Y. Circle No. 182.

Cellubander: Bulletin describes the John Burton automatic Cellubander for applying cellulose band seals—John Burton Machine Corp., 1600 West St., Concord, Calif. Circle No. 183.

Transparent Bags: Brochure lists over 500 stock sizes of bags always on hand—Chicago Transparent, Inc., 4806 W. Chicago 51, Ill. Circle No. 184.

Printer/End Caser: Case Printer #1099 describes the printer which is used for straight line operation for printing sides and/or ends of shipping cases. End Caser #1115 describes an end caser that automatically cases all types of cylindrical containers, except glass—Chisholm Ryder Co. of Pa., Hanover, Pa. Circle No. 185.

Aerosols: "The Magic of Aerosols" is a 28-page booklet that traces aerosol history and growth, markets and products,

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with Clipper

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You can lace belts up to 12 inches wide all in one operation with Clipper Belt Hooks and Lacers. Until the Clipper hooks shown above were inserted into the jaws of the lacer, they were protected and held in place by a reinforced card that is easily stripped away once the hooks are in the lacer. The lacer jaws, exerting up to 45,000 lbs. of pressure, embed the hooks firmly and uniformly across the width of the belt. And in the belt, each hook is separate from the others to give flexibility not possible with other methods of belt lacing. For unmatched speed, strength and flexibility, depend on the proved Clipper machine-lacing method.

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Bulletins

container availability and industry services—Continental Can Co., 100 East 42nd St., New York 17, N. Y. Circle No. 186.

Packaging Machines: Seven new catalog sheets—each describes a packaging machine, giving pertinent information for each. Machines described are: Case Opener-Former, Speed King, Empty Can Packer, Air Speed Empty Can Packer, Standard Mechanical Filled Can Packer, Automatic Case Gluer, Compression Unit, and Depalletizer — Crompton & Knowles Packaging Corp., Holyoke, Mass. Circle No. 187.

Hand Sealer: Brochure entitled "Closure Problem" introduces a hand sealing tool which the small baker could use to close vertical flange or interrupted vertical curl aluminum foil containers. Either board or transparent plastic covers can be applied with it—Ekco-Alcoa Containers, Wheeling, Ill. Circle No. 188.

Tape Sealing: 4-page folder describes the Model M-10 Tape-Line system for tape sealing new or multi-use corrugated cases —Emhart Manufacturing Co., Portland, Conn. Circle No. 189.

Gluing/Sealing Machines: Booklet describes the various models of Packomatic paperboard shipping case gluing and sealing machines—J. L. Ferguson Co., P. O. Box 1226, Joliet, Ill. Circle No. 190.

Containers: Brochure describes Fibreflo—a unique and liquid tight container. Fibrezip advertisement is a reprint of an ad describing the Fibrezip end loading, top opening shipping container—Fibreboard Paper Products Corp., 475 Brannan St., San Francisco, Calif. Circle No. 191.

Coders/Markers: Specification sheets describe various automatic production line coding, marking and imprinting machines —Adolph Gottscho, Inc., Hillside 5, N. J. Circle No. 192.

Packaging Equipment: "Compak Means Complete Packaging"—an 8-page brochure that illustrates various feeds, attachments, ranges and speeds for the potential user—Hayssen Manufacturing Co., 1305 St. Clair Ave., Sheboygan, Wis. Circle No. 193.

Coders/Imprinters: 8-page booklet describes a line of equipment for printing cartons, packages, boxes, cans, bags, wrappers or unwrapped products—Industrial Marking Equipment Co., Inc., 257 West 38th St., New York 18, N. Y. Circle No. 195.

Stapler: "The Air Boxer" describes a new air-operated, portable stapling machine for closing cartons after they are filled —International Staple & Machine Co., P. O. Box 270, Herrin, Ill. Circle No. 196.

Carton & Machine: The Diafold brochure describes and illustrates a new carton and machine team for frozen French fried potato packaging—Marathon, a Div. of American Can Co., Menasha, Wis. Circle No. 197.

Former/Filler: Specification sheet describes the Transwrap S-750, an automatic bag forming, filling and sealing machine with advanced engineering and operating features — Package Machinery Co., East Longmeadow, Mass. Circle No. 198.

Uncaser: 4-page brochure (Form 3R-3470) describes the RCA uncaser which handles 4" to 8" high, single-layer packed cases at speeds of up to 50 cases per minute—Radio Corp. of America, Front & Cooper Sts., Camden 2, N. J. Circle No. 199.

Bag-Line Plant: Bulletin 270 on Bag-Line Plant describes incline manufacturing from resin to printed bags. Bulletin 291 describes the Dual-Manifold Blow Molder used for the production of hollow plastic products. Bulletin 350 describes size reduction equipment that reduces a wide range of wet and dry material—F. J. Stokes Corp., 5500 Tabor Rd., Philadelphia 20, Pa. Circle No. 201.

Section G—CONTROL, LAB EQUIPMENT

Conductivity Equipment: Bulletin #24 describes electrolytic conductivity bridges and cells for use with bridges that have a wide range of usage in industry and agriculture—Industrial Instruments, Inc., 89 Commerce Rd., Cedar Grove, N. J. Circle No. 202.

Onstream Instrumentation: 12-page brochure describes the operating principles and applications of AccuRay tank and bin level control systems, continuous composition analysis systems, and container—Industrial Nucleonics Corp., 650 Ackerman Rd., Columbus 2, Ohio. Circle No. 203.

Comptroller: Comptroller brochure outlines (with pictures) the versatility of the comptroller for pre-control rather than post-control of production costs and quality—L.E.E. Inc., 625 New York Ave., N. W., Washington, D. C. Circle No. 204.

Pressure Gauge Tester: Brochure describes the pressure gauge tester—a precision instrument accurately calibrated for correcting faulty pressure readings in a plant — Terriss-Consolidated Industries, 22 Wooster St., New York 13, N. Y. Circle No. 206.

Section H—SPECIAL SERVICES

Warehouse Inventory: "Field Warehousing Inventory on Your Premises" is a handbook of information and facts for borrowers with an inventory—Douglas-Guardian Warehouse Corp., New Orleans, La. Circle No. 207.

Lithography: "Cut Printing Costs with Budget-Run" tells how to afford full-color lithography on low-budget, low-quantity jobs. Typical jobs are illustrated; prices are included—Muirson Label Co., 435 Stockton Ave., San Jose, Calif. Circle No. 208.

Shipper Service: "Transportation News" is a company house organ which describes new developments in the industry—Pacific Intermountain Express Co., 560 Mission St., San Francisco 5, Calif. Circle No. 209.

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STRAITS tin FROM MALAYA

JOINS
AMERICA'S
CANNING INDUSTRY
TO SALUTE...

Malaya's tin producers are pleased to cooperate with America's Canning Industry in celebrating the international observance of the 150th anniversary of the invention of the tin can.

No other container has served man so well and for so long a time. Yet the tin can, after a century and a half, is still the world's most modern container. For only tin cans combine all of these advantages: economy, strength, light weight, durability, attractiveness, nontoxicity, noncorrosiveness, ease of handling, unbreakability, no light damage to contents, and no effect on taste.

THE MALAYAN TIN BUREAU
Dept. 49-J 2000 K St., N.W.
Washington 6, D.C.

MALAYAN TIN BUREAU

8 of every 10* TIN CANS
are made with
STRAITS tin from MALAYA

*Based on U.S. Bureau of Mines statistics for 1954-58 average

THE CANNING INDUSTRY'S 150th BIRTHDAY

PART ONE: Fifty countries today pack 40 billion cans of 1,200 varieties of food products. The industry was born in 1810.

One of the seven greatest inventions of all time—the canning of food products—celebrates its 150th anniversary in 1960. It was in 1810 that Nicolas Appert of France published "The Art of Preserving Foods," in which he outlined the basic processing method used today. And it was in the same year that Peter Durand of England received a patent from King George III for his invention of the tin-coated metal canister.

In the century and a half since 1810, canning has spread to some fifty countries of the world, is used for the processing of about 1,200 varieties of food products, and has attained an annual volume of perhaps forty billion cans.

The greatest center of the industry is the United States of America. Close to 3,600 canneries in 49 of the 50 states annually turn out half or more of the world pack of canned foods, as nearly as it can be estimated by tinplate consumption figures. U.S. products range from Alaska salmon through Hawaiian pineapple, Wisconsin peas, New Jersey asparagus, California peaches, Florida citrus, Maine sardines, Illinois meats—ad infinitum.

Next largest producers of canned foods, in the order of their importance, are the United Kingdom, West Germany, France, Canada, Japan, Brazil, Australia, Argentina, Italy, The Netherlands, India and South Africa. These twelve, plus the United States, account for nearly 90% of the world's canned food pack (excluding Russia and her European satrapies, for whom no data are available). An accompanying chart shows the relative importance of the major nations in the industry.

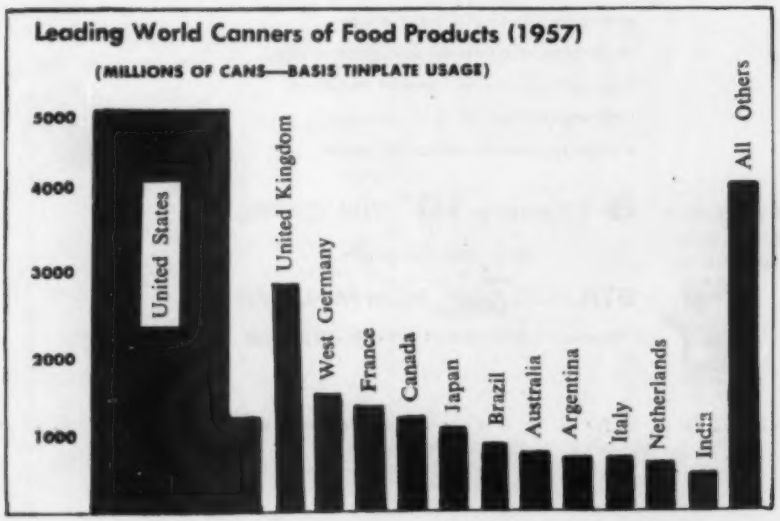
The U. S. pack in recent years has averaged about 780 million cases of various sizes, including 40 millions of petfoods. Of the 740 millions destined for human consumption about 90 millions (2½ basis) are fruits, about 200 millions (2 basis) are vegetables, and 115 (2 basis) are juices. These seasonal products were the foundation upon which the U.S. industry was erected and, as noted above, still represent more than half the total national pack. U.S. output of these items has risen, in the past twenty years, from little more than 200 million cases to double that amount.

At the same time, spectacular developments have occurred with what may be termed the general-line canned food products—those outside the regular fruit and vegetable field. The canned and glassed baby food pack of the United States today is six times what it was two decades ago. The canned meat output has more than doubled. The outturn of canned soups and of non-seasonal vegetables is up 50% or more. Shortening and coffee have approximately doubled their usage of cans. The pet food pack is more than three times what it was at the end of the 1930's.

NICOLAS APPERT

In all, there has been an average annual increase in the U.S. canned food pack, during the last two decades, of 14½ million cases a year, or perhaps 35 million cans every 12 months.

The U.S. canned food pack today is spread throughout the country, contributed to by 49 out of the 50 states. The central states—the Midwest and the middle South—consumed 41% of all food cans made and sold in 1959, U.S. Dept. of commerce reports. But the East—including the Northeast and the Southeast states—took 30%, and the 13 western states required 29%. The central area is the major production center for canned milk, meat and poultry, lard and shortening, petfood, and miscellaneous food products. The East leads in the packs of miscellaneous dairy foods and of coffee. And the West is the biggest packing area for fruits and vegetables, and for seafoods.



CANNING'S 150th BIRTHDAY

PART TWO: Nicolas Appert applied a scientific fact the men of Egypt bypassed. Others also helped make the industry great.

Over 4,000 years ago the Egyptians found that articles would last indefinitely if deprived of oxygen. They applied the knowledge to preservation of their illustrious dead—exhausting the oxygen in their pharaohs' tombs by sealing lighted oil lamps into their final resting places—but never thought to use it for food.

In 1765 an Italian scientist, Apallanzani, found that food, sealed in glass containers and boiled for an hour, would keep for many weeks. He never made practical use of the knowledge.

But in 1795 the French government offered a 14,000-franc award to anyone who could develop a system whereby that nation's armed forces could be supplied with wholesome nutrients while at sea or on the march. Nicolas Appert won that prize in 1809, after nearly 15 years of experimentation, and in doing so became the founder of the world's canned food business and our first great food technologist.

M. Appert was born at Chalons-sur-Marne in 1750, and devoted his entire life to work in confectionaries, kitchens, distilleries, breweries, etc., as well as being provisioner to the ducal house of Christian IV. To win the award, he designed his own containers (glass bottles with cork stoppers), cooked his foods in the glass containers by means of water baths, then stoppered them while still hot. Recognizing the importance of his discovery to mankind, he published his findings in a book in 1810.

Meanwhile, a tinplate plant had been operating in England since 1720, being established first to hammer out the plate and then, beginning in 1728, to roll out the thin iron sheets. Knowing of this availability of tinplate, and learning of Appert's discoveries, an Englishman named Peter Durand applied for, and was granted, a patent on a tinplated iron canister. The patent was allowed by King George III, in 1810.

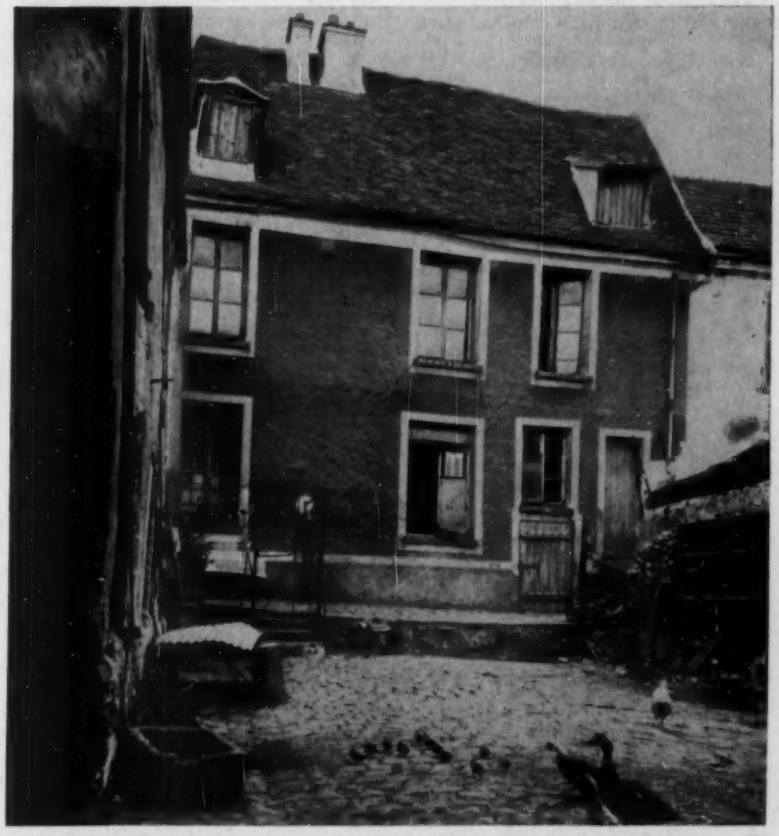
Bryan Donkin and George Hall, using Durand's patent, set up the world's first commercial cannery in 1812, on Blue Anchor Road in Bermondsey, England. In 1813 this plant sent tins of food to the British army and navy for trial, began shipping to British military bases in 1814, also supplied products to explorers.

William Underwood is believed to have been the pioneer U.S. canner, emigrating to this country from England in 1817 and setting up in the business of preserving foods in glass containers at Boston in 1819. He was closely followed by Thomas Kensett, who (with his father-in-law Ezra Daggett) began putting up oysters, meats, fruits and vegetables in a New York City waterfront plant in 1819. He applied for a patent on the use of "vessels of tin" for the purpose, and received it from Pres. James Monroe in 1825.

Gail Borden, the next great pioneer, in 1853, perfected a process for canning condensed milk. During the War between the States, his product proved of tremendous value, and its use spread rapidly especially for infant feeding.

Louis Pasteur, a French chemist, in 1862 laid the basis for putting the new business on a scientific foundation, when he experimented with bacteria, and developed the process of pasteurization—killing bacteria through heat.

It was then seen that some foods needed more strenuous cooking than others. Isaac Solomon made a step in this direction in 1860, when he added calcium chloride to cooking water, and thus raised the water's boiling point. But it was A. K. Shriver, in 1874, who invented the closed retort, and thus made it possible—and safe—to preserve today's tremendous variety of canned foods.



NICOLAS APPERT worked here at the turn of the 18th century, developing the process still basic to the canning industry. He was the first of all food technologists.

CANNING'S 150th BIRTHDAY

PART THREE: For canning, you have to have a can, and can-handling machinery. Many men contributed to these essentials.

Hand in hand with the discovery of improved food canning methods came developments in the container itself, and in the machinery for handling it.

As already noted, the British had invented a method for producing tinplate by rolling as early as 1728, and Peter Durand had first thought of employing this material for food containers in 1810. But the tinplate was heavy and uneven, and cans produced from it had to be made by hand.

The first major step forward in improving the canister was the discovery by Hennry Bessemer of England and William Kelley of America, in 1856 and 1857, of the process for converting cast iron into steel. This greatly expanded tinplate production, in addition to its many other results.

Then came mechanization of can-making. Although metal cans had come into general industry use as early as 1840, they still had to be cut out and soldered by hand—and hand-sealed as well. In 1847 Henry Evans was granted a patent for a pendulum press which, combined with Baltimore canner William Numsen's combination die device, could make a complete can end in a single operation.

A short while later, fixtures known as Jones' blocks were devised to hold the can body in position while the side seam was being soldered. Improvements in the application of solder to the side and end seams of cans and the beginning of mechanization in can-making upped the production rate of cans to 60 an hour in the late 1870's.

Between that time and 1900 came development of the semi-automatic turret type of can bodymaker with automatic side-seam soldering. This jumped can-making speed from about 60 an hour to 2,500 an hour. It also marked the beginning of the can manufacturing industry as a separate entity. Further, when machinery developed by the Norton brothers from the German lock-and-lap side-seam system was applied, can making speeds climbed again, to 6,000 cans an hour.

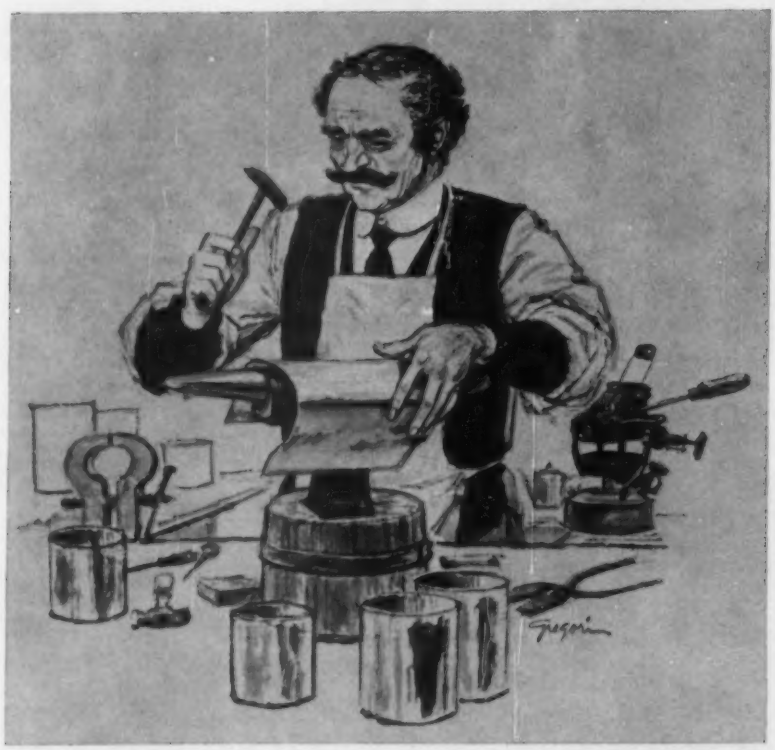
A major development of the 1900-1910 era was the development by Ams, Bogle and Cobb of the sanitary or open-top can, supplanting the hole-in-cap type which had seriously limited both packing speeds and product variety. By 1920 this closure had almost completely replaced the older lid.

Since then, can-making efficiency has grown with every passing year, until today it is possible to turn out up to 30,000 containers an hour—against the five or six an expert could have made by hand in the early 1800's.

Improvement in the sheet steel used for cans, and changeover from the old immersion tin-coating method to the present-day electrolytic one, have produced containers which are far lighter, but much better, than those of the past. In addition, application of sturdy, non-toxic lacquer linings have permitted canning additional types of foods, and have extended shelf-life for other items.

The making of tin plate has become spectacularly mechanized. A major shift in technique, at the present time, involves the making of sheets of tin plate, from rolls of tin plate. This has been handled by the steel companies. Now, after construction of huge plants, installation of elaborate machinery, the can-making companies are taking over.

Although this story is concerned primarily with the tin can, it would be entirely incomplete without brief reference to the canners' suppliers who have made so many contributions in the way of improved raw products for canning, high-speed machinery for preparing and processing and packaging, lithography and printing for labeling the finished packs, and fibre cases for shipping them to makret. Without all of these major partners, the canners' progress would have been far slower.



CAN-MAKING was a tedious job before mechanization. This sketch shows a skilled workman hand-forming and soldering the containers. His daily output was about 50 tins.

CANNING'S 150th BIRTHDAY

PART FOUR: Canned foods are ideal vehicles for today's U. S. self-service supermarkets. They are big business overseas, too.

A very good case can be made for the metal can as the single factor which played the most important role in the development of America's great food-merchandising system.

For it is the metal can that is the grandfather of all convenience food items, and it is the metal can that still offers the greatest variety of easy-to-prepare foods.

And it is the canned product which is a keystone in the operation of today's supermarket. For volume and turnover are essential in the present-day low-cost, self-service distribution set-up, and canned goods are made to order for volume and turnover.

No wonder, then, that in 1958 (says Can Manufacturers Institute) canned food sales accounted for $4,438,000,000 in supermarket sales. With the exception of fresh meat and produce, they were the heaviest dollar producers to move across the check-out counters.

Said one regional chain executive recently: "Canned foods are the backbone of our stores. Because of their low handling costs, lack of need for refrigeration and specialized personnel, they can do more for us from a net profit standpoint than any other category of items."

A recent survey of canned food retail sales and handling costs conducted by an independent research organization would appear to bear out the contentions of this speaker. In a two-year study of 247 retail food organizations operating 34,000 supermarkets around the country, the following basic facts on canned foods were pinned down:

- They account for an average of 21% of total store net profit.
- They make up approximately one-sixth of total store sales.
- They yield an average gross profit of 16%.
- They cost less to handle than any item or category of items in the supermarket.

Mark-up makes canned foods the fourth most profitable category of food items in the average retail store, led only by meat, produce and miscellaneous. This tells only part of the profit story, however. The other half is found in the high turnover and low cost of handling.

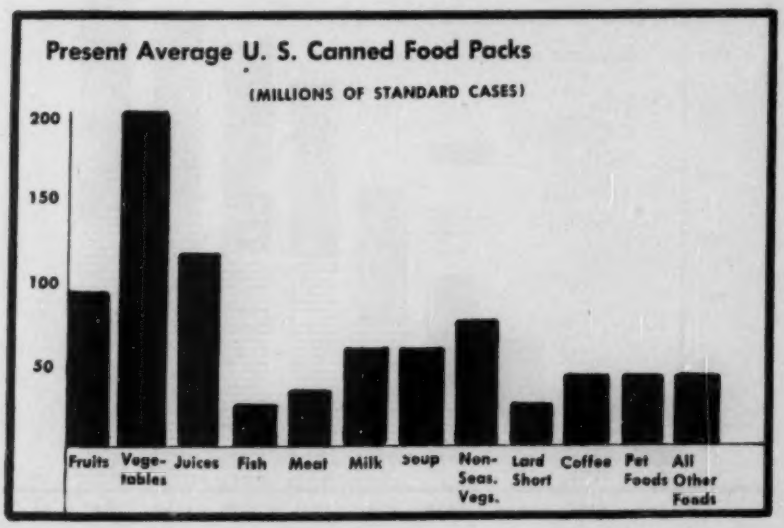
For example, when a high-markup item may turn over at the rate of six or seven times a year—no mean accomplishment for some of them—canned foods sell out anywhere from 20 to 32 times a year, according to Can Mfrs. Institute. And, where high-profit meat, produce, etc., may cost 5% or better to handle, canned foods handling expenses run only about 1½%. The most inexperienced stock boy can unpack, price-mark and put on the shelf any type of canned food product.

Canned foods also stack up well as impulse items. Bright, informative wrap-around labels attract the attention of casual passersby, build interest in the cans' contents, give accurate data regarding ingredients and numbers of servings, and invite purchase.

The retail grocery is, of course, by no means the only sales outlet for canned foods. The institutional and remanufacturing trades are also heavy users of canned products, as is evidenced by the fact that in the past several seasons more than 20 million cases of fruits, well over 30 million cases of vegetables, and some additional quantities of juices, plus fairly good-sized amounts of other canned products, have been packed and sold in No. 10 and other semi-bulk cans.

Still further, foreign trade in canned foods is brisk and important. In 1959, the United States shipped out upwards of a billion pounds of canned foods, including 337 million pounds of fruits, 282 millions of juices (basis 10 lbs. per gallon), 170 of vegetables, 121 of condensed and evaporated milk, and lesser quantities of baby foods, meat, poultry and other specialties. U. S. imports included some 300 million pounds of meat, 121 millions of vegetables (mainly tomatoes) and 102 of fruits (principally pineapple and orange), plus lesser amounts of sauces, seafoods, juices, etc.

Other nations, similarly, also are heavily involved in canned good foreign trade. Japan, Formosa, Malaya, Australia, South Africa and Spain are among the nations heavily engaged in canned fruit exports, for example, whereas the British Isles, West Germany and some of the other European nations are important importers. Canned meat shipments are large from South America, and there is also important international movement in vegetables, milk, etc.



CANNING'S 150th BIRTHDAY

PART FIVE: Population growth is by no means the only reason canning has a bright future. Look for continued gains.

What is the outlook for the metal can in the next 150 years? It seems very promising.

Over-all production will undoubtedly increase. It has been doing so almost every year since the business got started. For example, in the United States the output was only about 70 million cases in 1921, and it is likely to be about 820 millions in 1961, forty years later. That's an increase of nearly 1,200%.

Future increases are likely for many reasons. One certainly is that population is growing. There are more mouths to feed, and hence more consumers for canned goods.

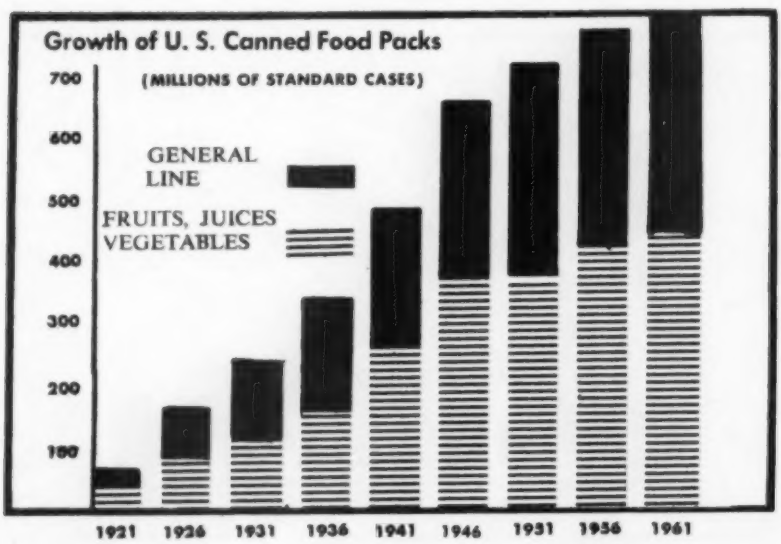
Another is that per capita income is rising, not only in the United States but in the world as a whole. Mr. and Mrs. America today can buy twice as many cans of food from their weekly pay check as they could 20 years ago. When real income rises, the demand for the sort of built-in maid service the tin can provides also goes up.

Ever-increasing product variety will contribute to future gains. Not only are more and more established products being canned, but new foods are being created just for canning. Perhaps 10 times as many types of canned products are available in U.S. markets today was could have been found in groceries of the early 1900's.

Canning becomes less and less seasonal. Once practically all operations were from March to October. Today, government can-shipment figures show, packers receive and use about 19% of their cans in the first quarter of the calendar year, 23% in the second, 38% in the third, and 20% from October through December.

The self-service trend in merchandising, so well established in many parts of this country, undoubtedly will gather further momentum, and this will tend to stimulate consumption (and production) of canned products. As previously noted, these foods are ideally suited to the needs of today's supermarket.

The quality rating of canned foods will continue to go up. Whereas many persons thought of canned goods as salvage merchandise half a century ago, today the shiny tins are known to hold nutrients on a par with any that can be obtained in other forms. In addition, the gourmet lines are becoming increasingly important, and these will add still further lustre to the reputation of canned foods in the housewife's mind. This, in turn, will stimulate production and consumption.



New convenience features also should help to boost can sales. We are on the threshold of a major breakthrough with one such feature as this is written. The pressurized or aerosol can, which already enjoys important acceptance in the cosmetic and insecticide fields, has already been adopted for a number of foods which do not require extensive heat sterilization. It can safely be said that the problems of such sterilization will soon be overcome, and that a much greater variety of foods will soon be obtainable.

Some 200,000 persons are employed in the plants which pack canned fruits, vegetables, juices, meats, milk and fish. The annual payroll of such establishments is more than $750 millions. But millions more are required to grow and harvest the crops, make the equipment and supplies, and handle the distribution and marketing of the finished packs.

Automatic coin machines will market more canned foods in the future. Already commonly employed for the sale of refrigerated and hot liquids, these are expected to become more intricate, capable of dispensing a wider variety of foods. They thus have the potential of making every grocery store, and every inplant feeding unit, an "Automat."

Finally, the canning industry and its suppliers may be counted on to make further major improvements in production methods and machinery, thus further improving canned food quality. One challenge under study today is that of finding a way to sterilize certain foods adequately, but at the same time to avoid so much of a cook that flavor, color or texture may suffer. This and other problems will certainly be overcome in the years ahead.

The world's canners, therefore, have been able to celebrate their industry's 150th birthday with pride in their achievements, with gratitude to their suppliers, and with confidence that the road ahead—while certainly not free of rocks and bumps—gives promise of a bigger and brighter future.

How much more does quality cost?

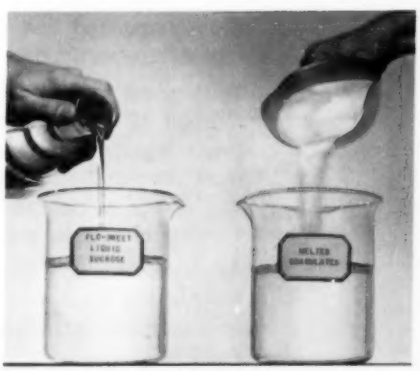
Not a penny, when you use Flo-Sweet for sweetening!

In fact, Flo-Sweet *saves* you money in a number of important ways. By eliminating manual handling of sugar. By avoiding sugar melting costs. In many areas, in the cost of sugar itself.

But a vital reason for the revolution that Flo-Sweet is making in food processing is *quality*. Flo-Sweet liquid sugars make possible a degree of quality control, and even quality improvement, that is difficult or too expensive with ordinary granulated.

You can easily verify Flo-Sweet's higher quality yourself, through the simple test shown at the right. Just dissolve some of your favorite granulated . . . concentrate it to 67° Brix . . . and compare its color with that of Flo-Sweet liquid sucrose.

Your Flo-Sweet engineer will be glad to help you explore ways to use Flo-Sweet liquid sugars in cutting costs while boosting quality. Why not consult him soon?



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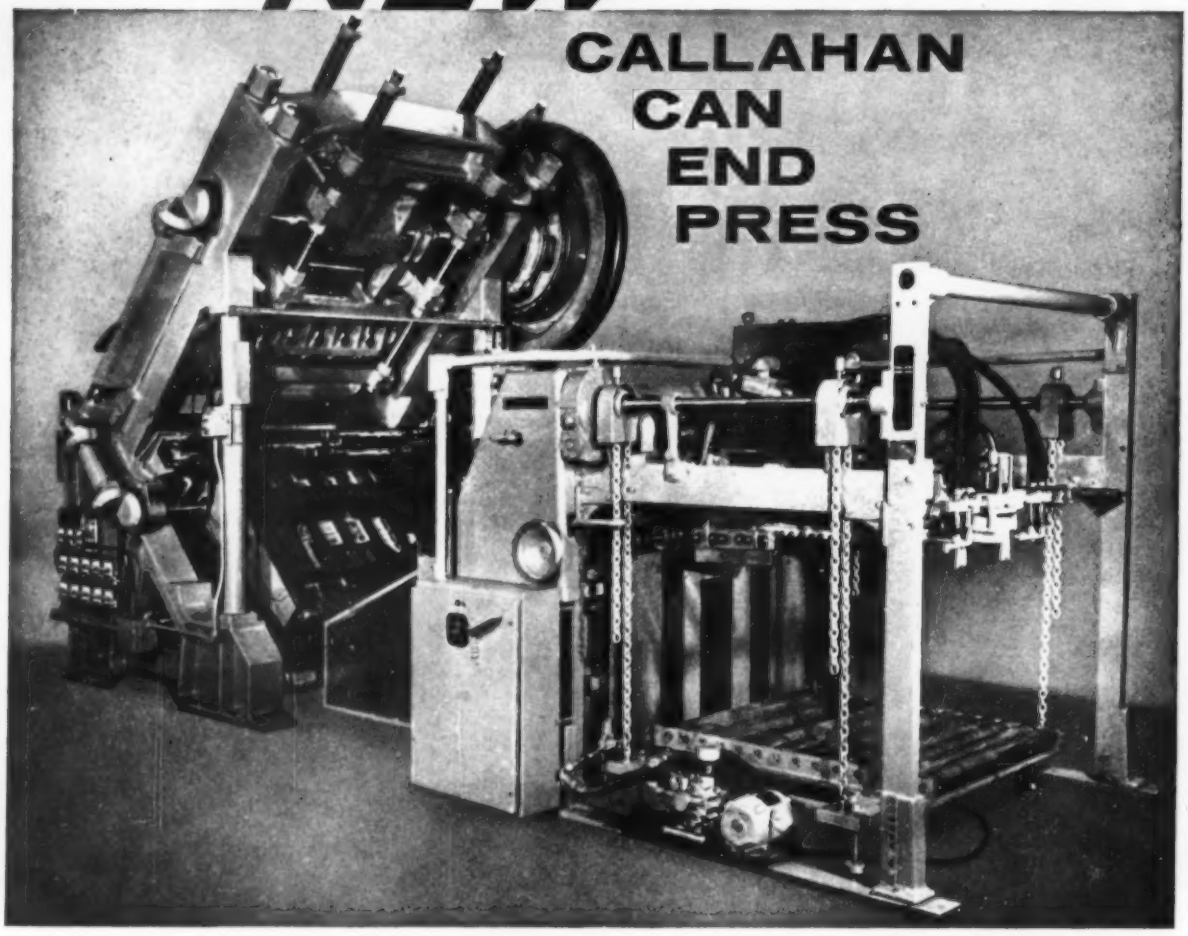

TRIMS PRODUCTION COSTS

Greatly reduced can end production costs result from the advanced fabricating technique incorporated in the new high-speed Callahan Gang Die Can End Press.

This model 562-DM press feeds full sheets, scrolled front and back; replaces the old method of manufacturing can ends from scrolled strips in conventional strip presses. Press register pins and cam-operated feed bars accurately locate sheets under the dies from the scrolled ends, eliminating the need to trim the sides of sheets. As a result, this radically new method provides substantial material savings, the amount of savings varying, of course, with the size of the can ends manufactured.

Adaptable for screw cap blanks and other shallow drawn covers, this Callahan press is built of the most modern components to assure long, trouble-free operation. For example, an automatic lubricating system services all principal working parts.

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Industry Progress Reports

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from *whole* California fruits,
and pineapple from Hawaii,
where the best pineapple grows.
Dole makes these fine products, too:
PINEAPPLE CHUNKS, SLICES, CRUSHED, TIDBITS, SPEARS, JUICE
Dole
FRUIT COCKTAIL

Processed Food Packs up in 1959

By ELVERTON B. STARK, Editor

Over-all production of U. S. processed foods gained a little more than 3% in 1959 over the 1958 total. Increases in output were recorded by all four major branches of the business—canned, dry, frozen and glassed.

Within the various divisions, however, there were the usual fluctuations, some items showing increases above the average, others remaining unchanged or declining in output.

Where to Find

Reviews: **Reports on individual groups of commodities, by industry leaders, follow directly after this summary. See frontispiece, page 101, for list of articles.**

Statistics: **Crop, production and distribution figures are provided in the Statistical section. See frontispiece, page 153, for locations of commodity data.**

Packers: **Leading packers of U.S. food products carry sales messages in this issue. See Advertisers Index for locations of these advertisements.**

Canned Food Gains

The U. S. pack of canned fruit and vegetable products went up slightly in 1959 over 1958, but was still below the record year of 1956. Canned fruits were up sharply. Canned seasonal vegetable packs, however, fell off slightly, and the canned juice pack, too, was a little smaller.

The "all-other-heat-processed foods" group showed a small gain in 1959, packing an estimated 300 million cases of baby foods, seafoods, meats, milk, nationality products, spaghetti items, poultry, soups and non-seasonal vegetables. Revised figures for 1958 show an output of 296 million cases, and for 1957 276 millions. The coffee, shortening and lard, and petfood group showed a rise in output from 101 million cases in 1957 to 104 millions in 1958 and 107 millions in 1959.

Preliminary data for 1960 point to slightly smaller packs of canned fruits and seasonal vegetables, a juice pack on a par with 1959-60, and a continued gain in the production of canned juice-drinks, ades and punches (the latter not included in the canned pack figures). Most of the other canned food items are expected to show moderate gains in outturn in 1960.

Glass Growth Continues

The U. S. glassed food business, which has rung up a production gain every season since 1951, did it again in 1959. The national pack totaled 361 million cases, up from 348 millions in 1958 and 328 millions in 1957.

Gains were significant for baby foods, soluble coffee, juices and salad dressings, and for miscellaneous foods packed in glass (nutmeats, mixes, instant items, etc.). Smaller crops cut the packs of honey, cucumber pickles and tomato products.

The 1960 pack is expected to show a further increase over that of 1959. Tomato and cucumber products again are believed down this year, but gains in othr items will more than compensate for these declines.

Frozen Production Up

In total, U. S. frozen food packs went up 175 million lbs. in 1959, to reach a record high of 7,055,000,000 lbs. (7 billions).

Gains were indicated for fruits, vegetables, eggs and convenience or prepared foods. The output of frozen fish and poultry is believed to have been relatively unchanged, and packs of juices and of meats to have declined.

Figures for both 1958 and 1959 packs of convenience foods have been revised sharply upward, in line with data from the U. S. 1958 Census of Manufactures. The 1958 frozen convenience food pack had been estimated at 1,000,000,000 lbs., but new information shows it to have totaled 1,485,-200,000 lbs.

Preliminary date indicate a smaller frozen output in 1960. Packs in the first part of the year were smaller in such items as strawberries, peas, eggs and fish, and although gains are expected in convenience foods, they are not likely to be enough to compensate.

Dry Good Packs Grow

U. S. production of dry processed foods continued to show a gain in 1959, according to best available statistics—climbing from 19.1 billion lbs. in 1958 to 19.7 billion in 1959.

Increases were shown in the output of cocoa, coffee, tea, potato chips, eggs, nonfat dry milk, fruits, tree nuts, cane sugar, peas, potato products and dehydrated vegetables, and it is presumed that some of the other packs for which details are not available also recorded gains. Production of peanuts and dry beans was down, and deliveries of beet sugar were off slightly.

In 1960, it is estimated, the total dry food pack may be down slightly from 1959.

U S. Processed Food Packs

in billions of pounds, converted from data in the Statistical Section. Conversion factors used are 40 lbs. per case of canned product, 24 lbs. per case of glass. For details, see Industry Statistics Section.

Year	CANNED FOODS			DRY FOODS			FROZEN FOODS			GLASSED FOODS			ALL PROCESSED		
	Fruit Vegs., Juices	All Other Foods	Total	Fruit, Vegs., Nuts	All Other Foods	Total	Fruit, Vegs., Juices	All Other Foods	Total	Fruit, Vegs., Juices Nuts	All Other Foods	Total	Fruit, Vegs., Juices Nuts	All Other Foods	Total
1954	15.2	13.6	28.8	4.6	29.1	33.7	2.2	2.2	4.4	3.5	3.1	6.6	25.5	48.0	73.5
1955	16.0	14.2	30.2	5.2	30.6	35.8	2.6	2.5	5.1	3.5	3.9	7.4	27.3	51.2	78.5
1956	18.4	14.6	33.0	5.5	32.3	37.8	3.0	2.8	5.8	3.8	3.8	7.6	30.7	53.5	84.2
1957	16.2	15.1	31.3	4.8	32.1	36.9	2.6	3.2	5.8	3.8	4.1	7.9	27.4	54.5	81.9
1958	16.8	16.0	32.8	5.4	32.8	38.2	2.9	3.9	6.8	3.9	4.1	8.0	29.0	56.8	85.8
1959	17.0	16.3	33.3	5.6	33.8	39.4	2.9	4.2	7.1	3.6	5.1	8.7	29.1	59.4	88.5

SALAD DRESSINGS: Industry Seeks Continuous Process

By JEROME J. GELFAND
Recipe Foods, Inc.
and President,
Mayonnaise & Salad Dressing Manufacturers Assn.

JEROME J. GELFAND

It is difficult for any one of us to recall that time when mayonnaise and salad dressing products were not on the grocery shelves. Strangely enough, in the whirl of new concepts of packaging, our industry has changed but little from its original packaging designs.

Despite this our business has experienced substantial growth in terms of consumer use, and this growth has been equal to or ahead of the population increase of our nation.

Beneath the stability and apparent calm presented to the balance of the food trade, the entire mayonnaise and salad dressing industry stirs within with a turbulence like that created by the equipment used in its manufacturing processes.

What then are the significant factors which mark the past year?

There are many—but of them all, these stand out.

First there was a recognition of an outstanding improvement in raw materials used which has enabled our industry to increase the shelf life of its product over twenty per cent.

Second is the general feeling among the manufacturers and their equipment suppliers that we are at long last on the threshold of perfecting a tested and proven continuous automatic manufacturing facility.

This development—long worked on and awaited by the entire industry—appears almost a reality.

Though these developments come in the main from individual companies, both suppliers and manufacturers, our industry has the benefits of a very active trade association. The Mayonnaise and Salad Dressing Manufacturers' group has, through its excellent technical committee, coordinated the handling of quite a few industry-wide problems and projects.

Last but not least, and not particularly indigenous to the mayonnaise and salad dressing industry, is the continued growth and expansion for private labels or controlled brands.

This trend has resulted in casualties in names and companies long known in the industry. But, such is the fascination of our trade, we have seen more than a normal number of newcomers in the manufacture of our products in the past year.

So, the hearty breed of the men and women of our industry still look forward to the coming year and years with complete knowledge of their problem, but with unshaken confidence in the future.

DRY VEGETABLES: Industry Continues to Increase Packs

By the Staff of
CANNER/PACKER

The dry vegetable industry is a prosperous blend of old and new products, including dry beans and peas (known since the birth of civilization), dehydrated vegetables (which had their first boom in World War I), dried peppers (increasingly produced as Mexican foods gain in popularity), soup mixes (which gained wide acceptance in World War II), and instant potato products (a rapidly growing phenomenon of the 1950's).

The industry as a whole reached its production peak in 1943, during World II, when the known output was 1,536,000 short tons. Of this total, beans contributed 972 thousand tons, peas 501 thousands, dehydrated vegetables (including potatoes) 63 thousands. No soup mix pack figures were available.

With beans and peas leading the way, the business dropped its output sharply as the conflict drew to a close, producing only 921 thousand tons in 1945. Since then, it has been fighting its way back to popularity, both in the United States and abroad, and in 1959 had a combined output of 1,220,000 tons (still excluding soup mixes).

Beans continued to be the major product in 1959, with an outturn of 911 thousand tons or 1,822,000 100-lb. bags, below the 1958 pack of 929 thousand tons but bigger than any other year since 1949. Bean packers hope for still bigger sales volume in future years as they promote foreign sales and conduct research to improve the cooking and eating characteristics of their food. Continued growth of the U. S. canned prepared bean business, which is estimated to have consumed 370 thousand tons of the 1959 crop, also is a favorable factor.

Peas ranked second, with a pack of 219 thousand tons (438,000 bags) in 1959, against 125 thousand tons in 1958. The 1959 output was required to cover requirements left unsatisfied by the very short 1958 output. As with beans, an increasing part of the U. S. dry pea industry's market is represented by overseas shipments.

The potato branch of the business continues to be the most exciting, having expanded sharply again in 1959, and giving promise of doing the same thing in 1960. Granules, flakes, slices and dices are all being produced and marketed successfully in dehydrated form, for retail sale, for institutional use, and increasingly for remanufacturing. Idaho is the major producing state, but other areas also participate in the pack, which is estimated to have been about 120 million lbs. (dry weight) in 1959, and which could come close to 200 millions in 1960-61, as many additional production facilities come into operation.

The production of other dehydrated vegetables in the United States is estimated at about 60 million lbs. in 1959.

This would be the second largest pack in history, exceeded only by the 76 millions produced in the war year of 1944. Of the 1959 output, about 20 million lbs. consisted of onion, 10 millions of garlic, 10 millions of peppers, and 20 millions of all others. Onion and garlic consumption in the manufacturing industries has steadily increased in the last 20 years, and of late a retail pack of instant onion has swelled the market's volume. Peppers, as noted above, have found increased demand with the rising popularity of Mexican-type canned, frozen and fresh foods. And there is a strong and growing demand for many other dehydrated vegetables, for such varied remanufacturing products as soups, stews, meat pies, sauces, relishes.

The dried vegetable industry, which struggled so valiantly to stay alive after World War II, has clearly come into its own today.

FROZEN FOODS: Today and Tomorrow Both Look Good

By W. F. EDWARDS, Genl. Mgr. Pasco Packing Co. and President, Natl. Assn. of Frozen Food Packers

"What is past is prologue" is the inscription on a famous building in Washington. Applying this thought to the frozen food industry, I will attempt to interpret some of its past performance in light of current trends and so suggest some of the things we may expect in the years just ahead. Production figures compiled by the National Association of Frozen Food Packers will serve as a good point of departure.

The 1959 frozen vegetable pack of 1.6 billion pounds is the largest yet recorded. It placed the country's total supply of frozen vegetables at 2.5 billion pounds—also a record figure. But consumption has been increasing in proportion to rising pack figures. In 1959, consumption just about equaled production. This is indicative that stocks are normal and large enough to support only the current rate of consumption.

The frozen fruit picture is generally quite similar to that of vegetables, but perhaps not as spectacular. Annual frozen fruit production, ranging in the six to seven hundred million pound area in recent years, has kept the total supply hovering around the 1.1 billion pound mark. Consumption has not matched the rapid growth of that of frozen vegetables, but over the years has shown a steady rise. 1959 production of frozen fruit was 617.6 million pounds. Consumption, however, was calculated at about 646 pounds, almost 30 million pounds greater than production. This has resulted in quite manageable stocks and an orderly and profitable marketing situation.

W. F. EDWARDS

Now, let's consider that portion of our industry with which I am personally most closely acquainted. Today, better than half of all oranges produced in the U. S. reach the consumer as frozen concentrate. Since the introduction of this item in 1947, its production has shown a meteoric increase each year, except for the 1957-58 season during which we experienced a series of disastrous freezes. Remember, too, that other frozen citrus products have made their appearance and have grown apace. Scarcely half of the potential market has been tapped, and it is my opinion public acceptance of and demand for these quality products will continue their growth in the years ahead.

Although equally accurate figures are not yet available for prepared frozen foods, it is well known this segment of the industry is experiencing exceedingly rapid growth in both quantity and variety of products. And I am sure that this is only the beginning. To support this, I cite the confidence in the future of the frozen food industry as demonstrated by the increase in capital investment of packers, expanded operations and new entries to the field.

Present indications are that 1960 will not be a record breaking production year, based on raw material availability. However, I do believe packers and others in the industry will capitalize on the increasing efficiencies in production and distribution to continue the steady increase of frozen food consumption. The supply should be adequate since the industry has, over the years, demonstrated its ability to support greater consumption with proportionately smaller stocks.

My belief in the bright future of frozen foods in the years just ahead is further supported by the efforts being put forward by all segments of our industry to make our products more and more attractive to the consumer. Significant advances are being made in packaging which enhance the convenience aspect of our products and at the same time make them more appealing. Improved equipment, new processing techniques and better quality control are continuing to raise the already high standards of our products. And it is particularly gratifying to note a spontaneous awareness of handling requirements and their steady improvement at all levels of distribution. This insures that the customer will receive the best the packer has to offer.

We must remember, too, if we are to continue our growth in the years ahead as we have done in the years past, that today is important as well. Packers must continue to work on improving quality and flavor. We cannot be sure present-day excellence will be good enough tomorrow. Other segments of this industry of ours must also strive to improve their techniques, whether it be supplying the industry with raw products, or handling and selling the finished products. The purchaser must know that we are consistently supplying the very finest.

It is with this spirit of inter-industry cooperation, combined with genuine ability, and a sincere desire to offer the consumer the best in food products at reasonable prices, which will keep us on the upward path. Yes, the years ahead will be good ones.

BAKING MIXES: Production Down in 1959-60 Season

By W. B. CASH, Vice-president and Director of Marketing, Flour and Mix Products, General Mills, Inc.

The total baking mix business in the United States declined about 8% in the 12 month period ending May 31, 1960. Although the volume of 50,000,000 cases is down from last year's peak, it still is approximately 2% higher than two years ago.

Every classification of baking mixes showed a decrease in consumer volume during the past year. Cake mixes, which comprise more than half the total tonnage, were down the least. Reasons for the general decline are somewhat difficult to pinpoint. Since the loss in baking mix sales was accompanied by a 7% decrease in family baking flour, we can assume that housewives are not baking as much with either mixes or from recipes.

Competition, has if anything, increased during the year. The consumer has received the most benefit from this activity through improved and new cake mixes. Patterns of cake consumption have varied very little from last year. Approximately 40% of all cakes are still purchased while a little less than a third have been baked from mixes. The remainder were prepared from recipes.

W. B. CASH

CANNED FOODS: Fruit, Vegetable, Juice Outlook Good

By MILAN D. SMITH, President Smith Canning & Freezing Co., and President, National Canners Assn.

Canners' shipments of canned foods during the 1959-60 marketing season have generally been at record highs. This strong consumer demand for canned foods is expected to remain at the present high level during the coming season. Current conditions of record high consumer disposable income and employment will contribute to this favorable situation.

Canners this year have continued to give increasing attention to product improvement and new product development. The result has been greater built-in "maid service" and a closer meeting of specific consumer preferences. Consequently, retail sales of canned foods are expected to reach a peak of $5 billion this year, which will be 35 percent higher than the $3.7 billion this year, which will be 35 percent higher than the $3.7 billion in retail sales of just 10 years ago.

One-half of the total canned foods consumed in 1960 will consist of canned fruits, vegetables and juices. The total supply for the 1959-60 marketing season for these three groups of canned products was slightly greater than the large supply available during the 1958-59 season. The supply of most individual canned fruits during the 1959-60 season exceeded the 1958-59 supply. The outlook for exports of most U.S. canned fruits in 1959-60 appears to be improved. However, competition from foreign canned fruits is expected to continue.

Canners' shipments of the record 1959 pack of canned fruit have been unusually large. Consequently carryover stocks were only moderately larger than last year. With the 1960 deciduous fruit crop expected to be 7% smaller than the large 1959 crop the canned pack is expected to be smaller than last year. Canners' carryover stocks into the 1960-61 season were about 15% greater than a year earlier, but distributors' stocks were 10% lower, thus the total supply of canned fruit in 1960-61 may be down slightly from the large supplies of a year earlier. Packs of citrus salad and grapefruit sections this past season were moderately smaller than in 1958-59 because of the smaller grapefruit crop in Florida. Carryover stocks of canned single-strength citrus juices were moderately larger than a year ago. Although shipments were greater, the pack was larger than last season.

MILAN D. SMITH

The supply of canned vegetables available for distribution to mid-1960 was very close to the large supply available a year earlier. The canned vegetable supply was augmented by a supply of frozen vegetables that was the second highest on record.

The supply of canned vegetables available for the 1960-61 marketing year will be smaller than last year because of the substantially smaller carry-over stocks. On the basis of 1960 planted acreage and the production estimates of the U.S. Department of Agriculture, the pack of canned vegetables will probably be about the same as in 1959. Present prospects indicate a marked reduction in the supply of canned peas and moderately smaller supplies of canned tomatoes, most tomato products and canned corn. More green beans and lima beans are likely to be available be-

cause of expected larger packs this year.

Continued attention by canners to variety and quality in canned food packs will assure consumers of adequate supplies of wholesome and nutritious canned foods with greater built-in service and greater selections for the housewife. The 1960 canned products will give the housewife an exceptional value among the various food products on retail shelves.

GLASS-PACKED FOODS: U.S. Growth Continues

By RICHARD L. CHENEY
Executive Director & Marketing Manager,
Glass Container Mfrs. Institute

Although statistics are not available for most of the many foods packed in glass, general reports indicate a continuation of the steady growth in practically all of the vast number of food products packed in glass.

Department of Commerce statistics show there were 8,670,000,000 glass bottles and jars used by food packers in the United States in 1959, a 4½% increase over 1958, which in turn had registered substantial gains inspite of the recession that affected most industries.

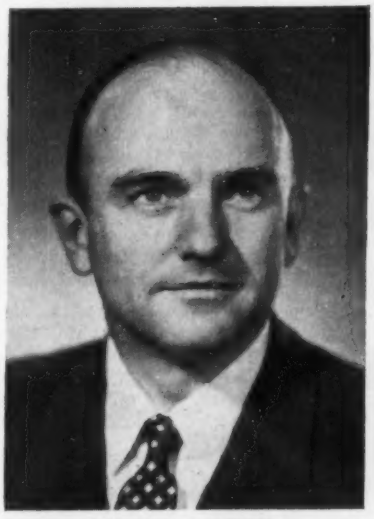
Of these containers, 2,310,000,000 were narrow neck bottles, and it was in this category that the greater gain was made. This occurred in spite of the fact that the catsup pack was off about 2,000,000 cases in 1959, the pack representing about 22,600,000 cases, or about 540,000,000 units. This means substantial growth was registered by other foods in narrow neck glass packs.

Glass-packed juices among other items showed very substantial gains in 1959. Tomato juice in glass, particularly, continued its long-term growth, having increased 95% in the past five years, or at four times the rate of increase of the over-all pack. The preferred size for tomato and vegetable juices seems to be 32 ounces, although there has been an increase in the use of 24 and 16 ounces during the past two years. Decanter shapes are more and more favored for these products.

Apple juice and combinations of apple juice with other juices such as cranberry juice and prune juice have also been on the increase. A cherry flavored cider is now on the market. A growing item in the metropolitan New York area is glass-packed grapefruit juice. Of course, prune juice continues to be a popular item.

Other areas contributing to the rapid growth of narrow neck glass containers for foods are the increasing popularity of liquid shortenings, the growth of the table syrup business with such exotic items as pineapple flavored syrup, the increasing use of decanters for vinegar and salad oil, catering to the gourmet food fanciers, and the fact that glass-packed meat sauces, for example, more than doubled in volume between 1954 and 1958.

Shipments of wide mouth food containers totaled 6,360,000,000 units (a



RICHARD L. CHENEY

3¼% increase over 1958). This gain was led, no doubt, by such items as processed baby foods, over 80% of which are apparently in glass today as compared with 13% in 1939. Total sales of baby foods were estimated at $300,000,000 in 1959 against $88,000,000 in 1954 and the industry is predicting sales of $500,000,000 by 1970. This forecasts substantial increases in glass container usage by this industry.

Although statistics are not available, it is apparent that there is a steady growth in the use of glass containers for processed vegetables and fruits. Beets represent one of the principal growth items in glass, in terms of volume, although asparagus tips show a much more spectacular rate of growth. The pack of sauerkraut in glass reached an estimated 300,000 cases in 1959 and reports are that the 1960 pack will surpass this considerably. Many other vegetable items are showing good potential growth in glass packaging.

Of the processed fruits, applesauce continues to lead the parade in terms of increased volume. There is a trend toward larger sizes for applesauce (35 ounces and 25 ounces), which larger sizes are generally comprised of a taller jar than the conventional fruit and vegetable jars. Apple slices show great promise, as do pie fillings, sold in three pound jars, including such favorites as apple, cherry, and blueberry. Pierced cranberries and cranberry relishes are now appearing in greater volume in glass and have received good trade acceptance.

Fruits which have special visual appeal continue to be popular in glass and include crabapples, Kadota figs, plums, berries, etc. On the eastern seaboard, particularly, a very successful item has been refrigerated citrus fruits packed in refrigerator type jars of about one-quart capacity.

A great number of convenience foods use glass containers and in virtually all cases the demand continues to grow at a lively rate. Sales of glass-packed instant coffee have quadrupled since 1951. Instant tea represented a pack of 16,400,000 jars in 1959, over three times the pack in 1956, and the industry forecasts spectacular gains in this item for the coming year.

Other "instants" which are enjoyed increased popularity are instant coffee cream, fruit beverage powders, vitamin-enriched, and instant or dehydrated onions, which latter have so captured the housewives' approval that they are now coming in king size jars holding 6½ ounces of product.

Among the vast array of additional glass-packed foods that might be mentioned, the following have shown particularly interesting market possibilities and growth in the past year: seasonings of all kinds including staple spices as well as the more exotic items; gourmet foods like mushrooms, fancy foods, snacks and the like; ice cream toppings which have seen the major producer moving into glass in 1959; and the many prepared foods such as spaghetti sauce, barbecue sauce, ravioli, spaghetti, etc.

COFFEE: Industry Continues to Seek Market for Surpluses

JOHN F. McKIERNAN

By JOHN F. McKIERNAN,
President,
National Coffee Assn.

Any brief review of the coffee industry over the past year must include four basic trends. These are: 1, a modest advance in roasting volume and per capita consumption; 2, a continuance of excessive surpluses of green coffee; 3, an expansion of promotional efforts in Europe, both by producers and the domestic trade there; and 4, a growing tendency on the part of growers to join forces in responsible efforts to solve their problems.

Although U.S. consumers are drinking more coffee than they have in any year since 1955, the per capita consumption figure is still about three pounds below the peak year of 1949. Moreover, despite a slight decline in the average number of cups brewed from a pound of regular coffee, homemakers continue to make the beverage about 1/3 weaker than they did ten years ago.

Among producers, there is a growing awareness of the importance of production controls in the long-term diminution of heavy surpluses. In some cases, corrective action has already begun.

The International Coffee Agreement nations, through their World Coffee Promotion Committee, are generating increased interest in coffee-drinking abroad. This activity, supplemented by organized promotional agencies in such countries as France, England, Italy, and West Germany, should help to boost per capita consumption and, to some extent, reduce world stocks of green coffee.

Meanwhile, the ICA has extended the scope of its membership, and latest reports indicate that a Pan-African federation of coffee growers may be in the offing.

On the domestic side of the trade, we anticipate a slow but steady trend toward improved brewing practices. The Coffee Brewing Institute is circulating three newly produced motion picture films which are already gaining wide acceptance among TV, club and school audiences.

We also discern an increased awareness among some roasters of the necessity to develop a new present and future market for coffee among the nation's youth. This is a market, the exploitation of which the National Coffee Association has been urging for many years.

Meanwhile, the popularity of instant coffee continues. The coffee break is growing as a part of the American way of life. And, great improvements have been accomplished both in the quality and the availability of vending machine coffee. These factors have contributed significantly toward the maintenance of coffee's position as this country's favorite beverage.

In summary, a more uniform and long-range approach to the solution of production problems, an intensified campaign to expand coffee consumption in areas where traditionally it has been low, and a concentration on the two most promising potentialities for increased domestic consumption (namely, improved brewing methods and the youth market) augur a good year for coffee trade in 1961.

CANNED VEGETABLES: Big Packs Move to Market

W. C. SCHORER JR.

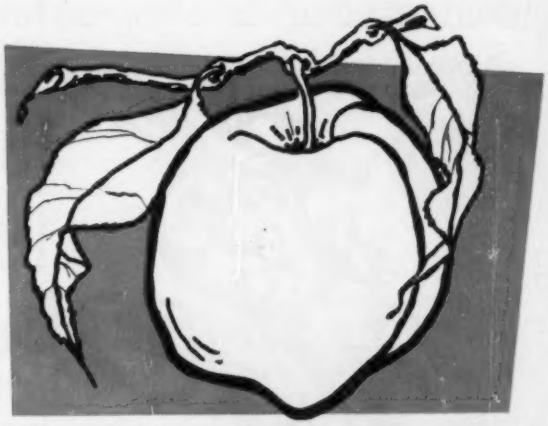
By W. C. SCHORER JR.
General Manager,
Reedsburg Foods Corp.
and President,
Wisconsin Canners Assn.

The 1959-60 marketing year was a difficult time for most vegetable canners, with prices at unprofitable levels. Sauerkraut was a notable exception as the result of a very short crop, but most vegetables produced a better than normal yield per acre, which tended to unbalance acreage adjustments canners had made.

Despite very large supplies, canned corn and canned green and wax beans ended their 1959-60 marketing years without excessive carry-overs as the result of exceptionally good shipments. The carry-over of 6.4 million cases of canned peas on June 1, 1960, although 35% below a year earlier, still represented a burdensome supply calling for a further downward adjustment in canned pea production.

The 1960 pea pack figures are not yet known at this time but it appears the pack will not exceed 28 million cases so that the supply for the 1960-61 marketing year will not be excessive and may well prove to be short before June 1, 1961.

The 1960 crop prospects for other vegetables for canning are generally good at this time and the outlook



CUSTOM PROCESSED CONCENTRATES

Thornton offers you the finest quality whole fresh fruit and tomato concentrates, prepared exactly to your specifications.

Thornton Canning Company specializes in the finest quality fruit and tomato concentrates for the remanufacturing and institutional trade.

Only farm fresh whole fruit and tomatoes and meticulous care go into the custom processing of Thornton concentrates. Your pack is tailored to your own special individual needs. Specific-gravity and texture are controlled with exacting precision.

You are invited to the Thornton plant to watch as your specified concentrate is being packed, and to see for yourself the quality control that has been so enthusiastically received by Thornton customers. Thornton custom packed tomatoes, for instance, can be delivered in various degrees of concentration, from specific-gravity 1.045 tomato puree to 46% solids, tomato paste — fine or coarse finish.

Thornton concentrates are available in 6 #10 tins, 6 #12 tins and are also aseptically packed at low temperature, to assure farm fresh color and flavor, in 55 gallon tin-lined steel drums that are easy to open, easier to handle and saleable when empty for added savings.

For dramatic new ease in handling and storage, Thornton now packs these same high quality, custom processed concentrates in dry crystal form. The crystals, milled to your specifications, are delivered to you in lightweight, low-cost fibre drums.

When you need the highest quality, custom processed fruit and tomato concentrates, think of Thornton, the brand name of quality.

Write today for more information!

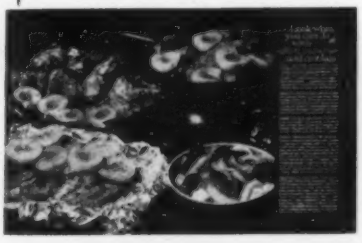
THORNTON
CANNING COMPANY
P. O. Box 108, Thornton, California

1960
1961

CLING PEACH–FRUIT COCKTAIL ALMANAC

FORECAST: BIGGEST YEAR YET! Quit when we're ahead? Nonsense! Of course it's true that last year the Cling Peach Advisory Board ran a million-dollar program in leading home service magazines like McCall's, Better Homes & Gardens, Life, in store books and newspapers...ads that boosted consumer demand for canned cling peaches and fruit cocktail higher than ever. And—to clinch these sales—we sent grocers merchandising ideas and store material galore. This year and next...we plan to do it again—only more so! Here are three of the exciting series on tap for you...

SEPTEMBER-OCTOBER: *Cool weather sure.* Hot meals again—chicken a favorite over the land. Cling peaches featured HOT with chicken in full-color double-page spread to appear in Ladies' Home Journal, McCall's and Better Homes & Gardens.



DECEMBER HOLIDAYS: *Fair and festive.* Fruit cocktail page features fabulous (but easy) desserts. Full-color in Woman's Day, Family Circle and Parents'.

MARCH: *A rosy future.* The sure-fire team of cling peaches and cottage cheese—but with a difference. A cling peach, sunset-tinted, cinnamon flavored! Full-color in McCall's, Better Homes & Gardens and Good Housekeeping.

OTHER MAJOR EVENTS: Real humdingers on every page of the calendar! Full-color ads and special promotions will appear in the pages of McCall's, Better Homes & Gardens, Good Housekeeping, Woman's Day, Family Circle —include holiday peach salads, cling peaches and meat, quick peach desserts, cling peaches and Betty Crocker Pancake Mix, fruit cocktail and Jello-O, fruit cocktail freezies!

Cling Peach Advisory Board.

indicates somewhat higher prices for canned vegetables.

The trend toward concentrating production in fewer and larger plants continues here in Wisconsin as well as elsewhere, stimulated both by marketing and production efficiency.

The snap bean picker is revolutionizing the canned green and wax bean industry bringing better quality to the consumer at lower prices than hand picking. A similar revolution seems to be under way in the use of the mobile viner. Some 65 of these machines were used in Wisconsin for vining peas this year and it appears that the number will be doubled next year. These mechanical harvesting developments require larger fields, fewer but more skilled employes, and fewer but more specialized farmers.

POTATO CHIPS: Sales Head for All-time Record in 1960

By FRANK E. MANN, President
Mann Potato Chip Co.
(div. of Sunshine Biscuit Co.)
and president,
Potato Chip Institute International

By successfully making the transition to the rank of a food staple while holding its position as the No. 1 snack, the potato chip has enjoyed a decade of unparalleled growth. Total sales for 1960 are heading for the $525,000,000 mark-well ahead of last year's record-breaking $475,000,000.

National gross sales for the first three months of 1960 ran 12 per cent over the same period of 1959.

Viewing the success story another way, the nation was consuming potato chips at a rate of 1.9 pounds per person a year in 1950. Now it's 4.4 lbs.

Many factors, of course, enter into this rise. Television viewing stepped up snack intake. Of great importance is the use of chips for breakfast, lunch and dinner. Both have helped make chips a year-round item rather than a mere summertime treat.

Intensive research designated to insure constant high quality of chips, and packaging improvements are pressed. Such information of value to the industry circulates freely through the Potato Chip Institute.

Of special interest is the growth in the international popularity of this American-invented delicacy. (An Indian chief named George Crum created chips at Saratoga Springs, N. Y., in 1853). In the last decade, more than 40 companies in 20 countries have joined the Institute, and a recent report even has the Russian government making potato chips through its state commission.

In merchandising chips besides its own strong educational program vigorous use always is made of tie-ins because chips go so well with other foods. Dips, which are finding widespread favor among hostesses are an outstanding example. Cheeses, fish and various meats are enhanced by chips and these angles are stressed for mutual benefit.

FRANK E. MANN

The youngsters of America, polled in a recent survey, named the potato chip as their "favorite vegetable." With that kind of solid support behind it, the industry is bound to forge ahead this year and in the future.

FROZEN FRUITS: Big Need Is for Promotion Program

By ARTHUR E. SYMONS
Hershey Packing Co.,
and President,
N.W. Canners & Freezers Assn.

Any amateur analyst or elementary mathematician can look at the current pack figures covering practically all of the frozen fruit and berry items and come up with the conclusion that every indication points to a steady strong market during 1960-1961 and to higher prices for the 1961 crop.

But any sales analyst can look at the price structure over the past four years on these same items of frozen fruits and berries and point out that the industry had better consider some kind of promotional program, continue to develop new outlets, and seriously consider ways of improving the quality of these products if this steady strong market is going to materialize. The demand for fruits and berries definitely is not keeping pace with the rest of the frozen food products and, over the years, demand and consumption are going to determine prices.

In 1956 the total U.S. frozen fruit and berrry pack was 694 million pounds. There has been a steady reduction in the figure ever since, with no real up-turn in prices to the packer—and this in spite of a great increase in

ARTHUR E. SYMONS

potential consumers and purchasing power. The figures on frozen berries during this period will convince anyone that a job of promotion is in order:

Year	Total U. S. production of frozen berries
1956	384,091,270
1957	364,830,806
1958	352,237,170
1959	331,655,172
1960 estimated	313,000,000

One need only to compare the relative amount of cabinet space given to frozen fruits and berries in the stores today as compared to the space alloted to these items five or ten years ago to understand how much their importance has diminished in public favor. The same trend shows up in the institutional pack. Strawberry ice cream was one of the three best sellers a few years ago and now it is way down the list—seventh in one important trade area.

The problem is clearly before us and cries for a solution. One answer, I believe, is an industry-wide promotion of fruits and berries with particular emphasis on the promotion of the newer items in the line that seem to have caught the public's fancy. Hand in hand with any promotion must go the insistence on, and never-ending search for, better quality of the product. It seems axiomatic that we will never build up a huge consumer demand for frozen fruits and berries when we continue to pack varieties that are unsuited for the retail pack, or grade B merchandise in retail packages.

When peas were distressed two years ago, the pea packers formed the Frozen Pea Council to promote sales of frozen peas; when the frozen potato packers felt they needed additional help in getting their product into consumption and avoid over-production they formed the Potato Council. The endeavors paid off and it would certainly seem that a similar agency to promote the use of frozen fruits would help solve this problem.

PEANUT BUTTER: Improved Product Wins More Sales

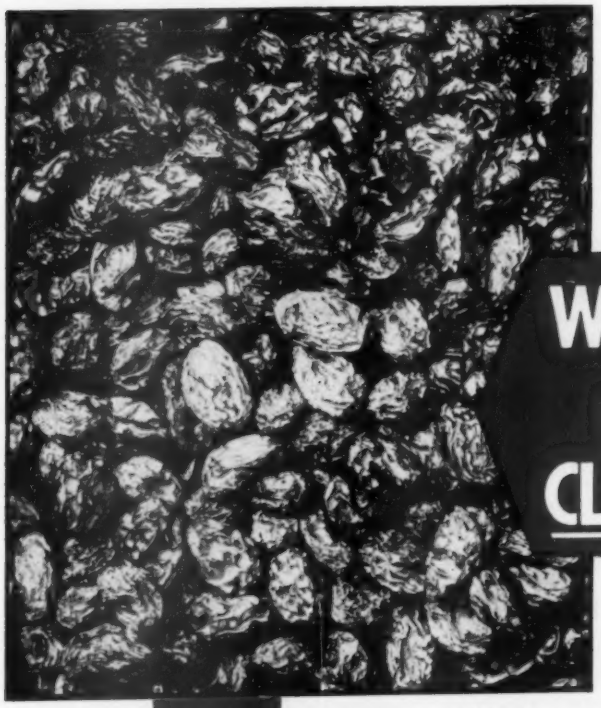
By the Staff of CANNER/PACKER

For the second year in a row, the U.S. peanut butter industry in 1959-60 set a new production record. Preliminary figures show a pack of 10,300,000 cases of jars and tumblers (24/1-lb. or equivalent), up from 10,200,000 in 1958-59 and well above the 9,200,000 cases packed in 1957-58.

To produce the 1959-60 pack, the industry utilized approximately 365 million lbs. of edible shelled peanuts, not counting the quantities consumed in making peanut butter for direct use in sandwiches by large-scale caterers and mass-feeding firms. This was a major proportion of all the shelled edible peanuts produced, as usual, and was by all odds the most important outlet for the crop.

In part, sales of peanut butter have been increasing as a result of the expansion of the U.S. population. The big crops of babies in recent years, in particular, have swelled the market.

(PEANUT BUTTER—*Contd. 116*)



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1 Stem in 7 Cases
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1 Stem in 35 Cases!

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one-tenth of one per cent—
at Least 25 Times Better
than the average tolerance!

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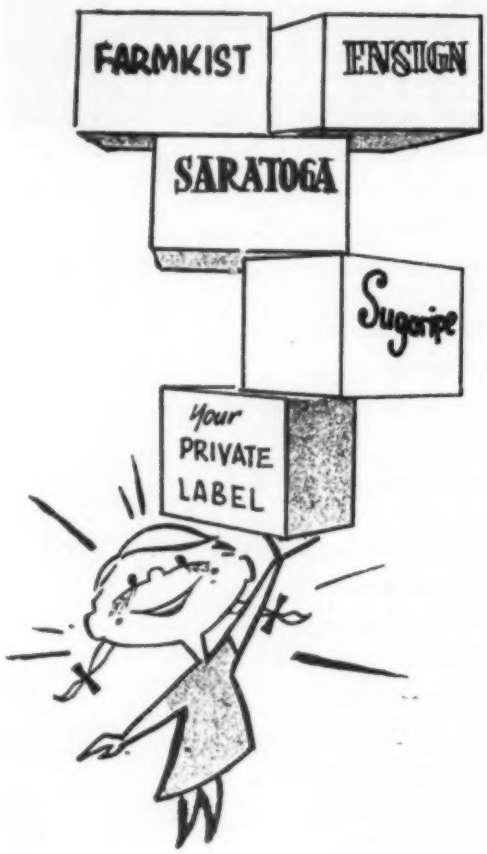

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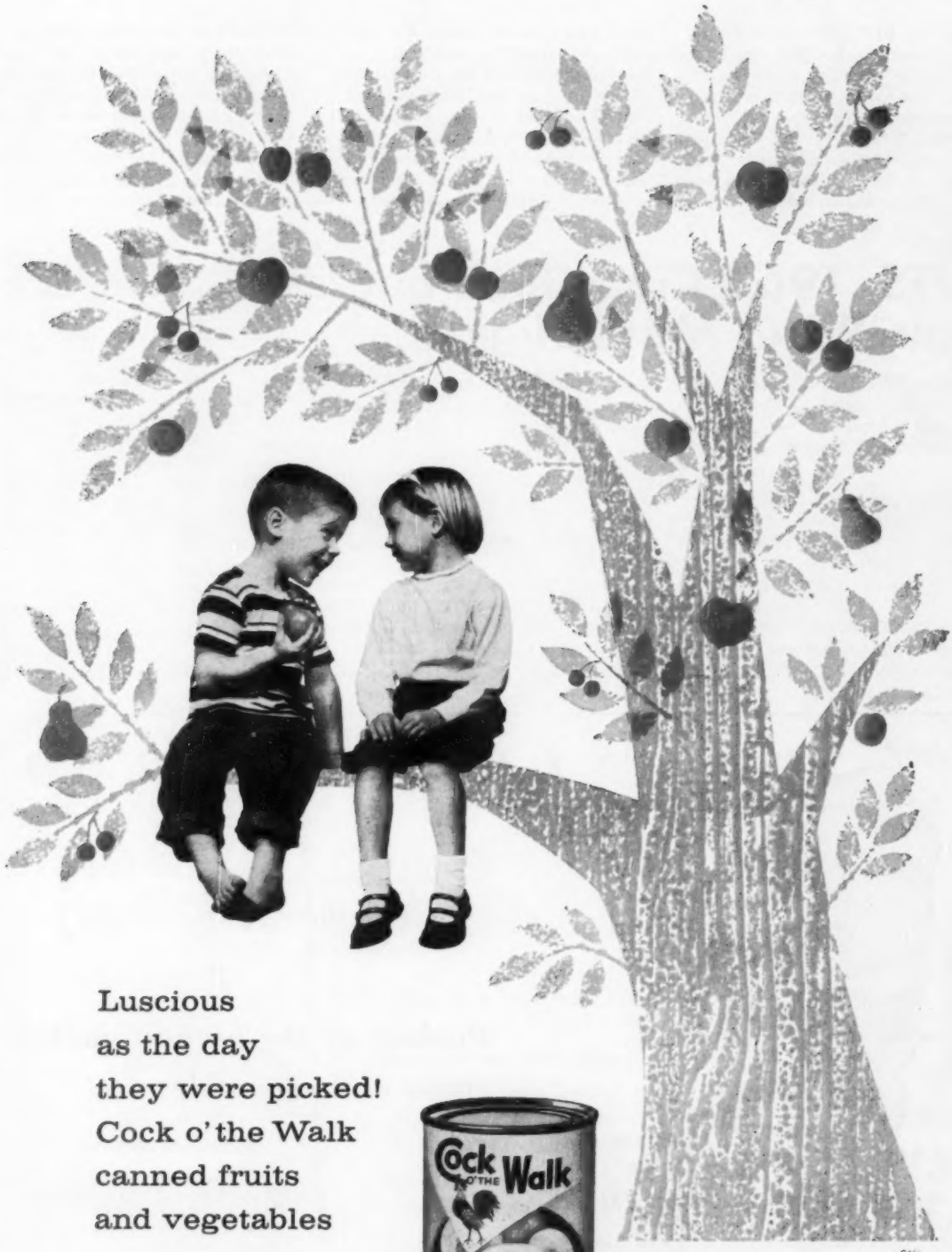

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Cock o' the Walk
canned fruits
and vegetables

TRI-VALLEY PACKING ASSOCIATION, 240 BATTERY STREET, SAN FRANCISCO

(PEANUT BUTTER—*from 112*)

More important, however, has been the industry's success in improving its product. Not too long ago this spread contained only ground nuts and salt, and tended to separate into solids on the bottom and free oil on the top. Now the hydrogenation process (in which the oil is withdrawn and returned in hydrogenated form) has eliminated the separation problem.

Of equal interest in the changing of the product has been the trend toward addition of other materials to contribute what the indusry—and apparently the consumers—considers an improvement in flavor and other characteristics. One glass packer reports that 25% of its peanut spread is now made up of ingredients which alter flavor and texture—including hydrogenated cottonseed and soybean oils, honey, corn syrup, dextrose and salt. Others have higher proportions of ground peanuts, but most of the major brands include some quantities of sweeteners and, of course, salt.

NUTS: 1960 Crop Good but Some Prices Move Higher

By JOHN RITCHIE. President All American Nut Co., Downey, Calif., and President, Peanut & Nut Salters Assn.

I believe, according to all reports, the peanut crop coming up this year should be one of the largest in history. In recent reports from the Virginia-Carolina area the Virginia crop is excellent. Also, from the Alabama-Georgia area we have reports the Dixie Runners again this year are producing an excellent crop. All over the Southwest, the crop production looks very good with the exception of the early crop which may not produce too much. In spite of the very late cool weather and rains, which made the crops late being put in, they are all coming off at about the normal time. They were digging in Texas in early August, and were harvesting Runners in Georgia by August 10th. Latest reports from New Mexico indicate the Valencia crop will, as usual, be excellent again this year.

Even though the peanut crop outlook seems very good at present the one thing that will really count is how many peanuts the shellers will have in their warehouses in October-December. As we have learned in the past, there are many things that could change the picture between now and fall—rains, freezes, cyclones, etc.

It is our belief that this year we shall see prices of all nuts go higher than last as a whole, with the exception of pecans and almonds. At the moment the peanut price has increased approximately 60c per hundred weight over last year, due to support increase, with some shellers getting 1c per pound more and we believe they are entitled to this much more profit. The basic price today of $0.155 for Spanish Splits and $0.165 for No. Ones should

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HEART'S DELIGHT FRUIT NECTARS
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DIET DELIGHT DIETETIC FRUITS, VEGETABLES AND NECTARS
Packed by
Richmond-Chase Company, San Jose, Calif.
BUILDING GREATER SALES THROUGH NATIONAL ADVERTISING

JOHN RITCHIE

enable the end-user to make money. Therefore, I believe that at the prices quoted today the end-user should cover part of his requirements.

In California the almond crop looks very good. Although it will not produce a "bumper crop" such as last year, we do expect a normal crop, including a normal proportion of large almonds which we did not have last year.

All indications are there will be a normal crop of walnuts this year, with the prices being slightly higher due to the small crop last year, which has left the pipe-line empty. Although most end-users use the domestic crop, we had some very fine walnut imports this year.

The Cashew situation still seems to be unsettled and, due to the strikes in India, some shipments of cashews have not been too good, qualitywise. The current cashew price is approximately 10c per pound higher this year than last, and is expected to go still higher.

Although the brazil nut situation seems to be easing to some degree, the prices are still quite high.

So far, Oregon reports on filberts are that we may expect a fair crop this year.

The pecan crops look better than they have for the past couple of years. We understand some of the people in the south have started spraying the trees to kill the insects that infest the pecan bud and cause considerable damage in various stages of development.

The most recent report on the California sunflower seed crop is that we may expect a good crop this year, although the acreage is down.

PET FOODS: Canned Items Rise; Dry Items Boom

By the Staff of CANNER/PACKER

U. S. packs of canned and dry dog and cat foods are both increasing, according to U. S. Bureau of the Census.

Canned production totaled 1,675,669,000 lbs. in 1958, according to the Census Bureau, whereas the output was only 1,459,847,000 lbs. in 1954. Of

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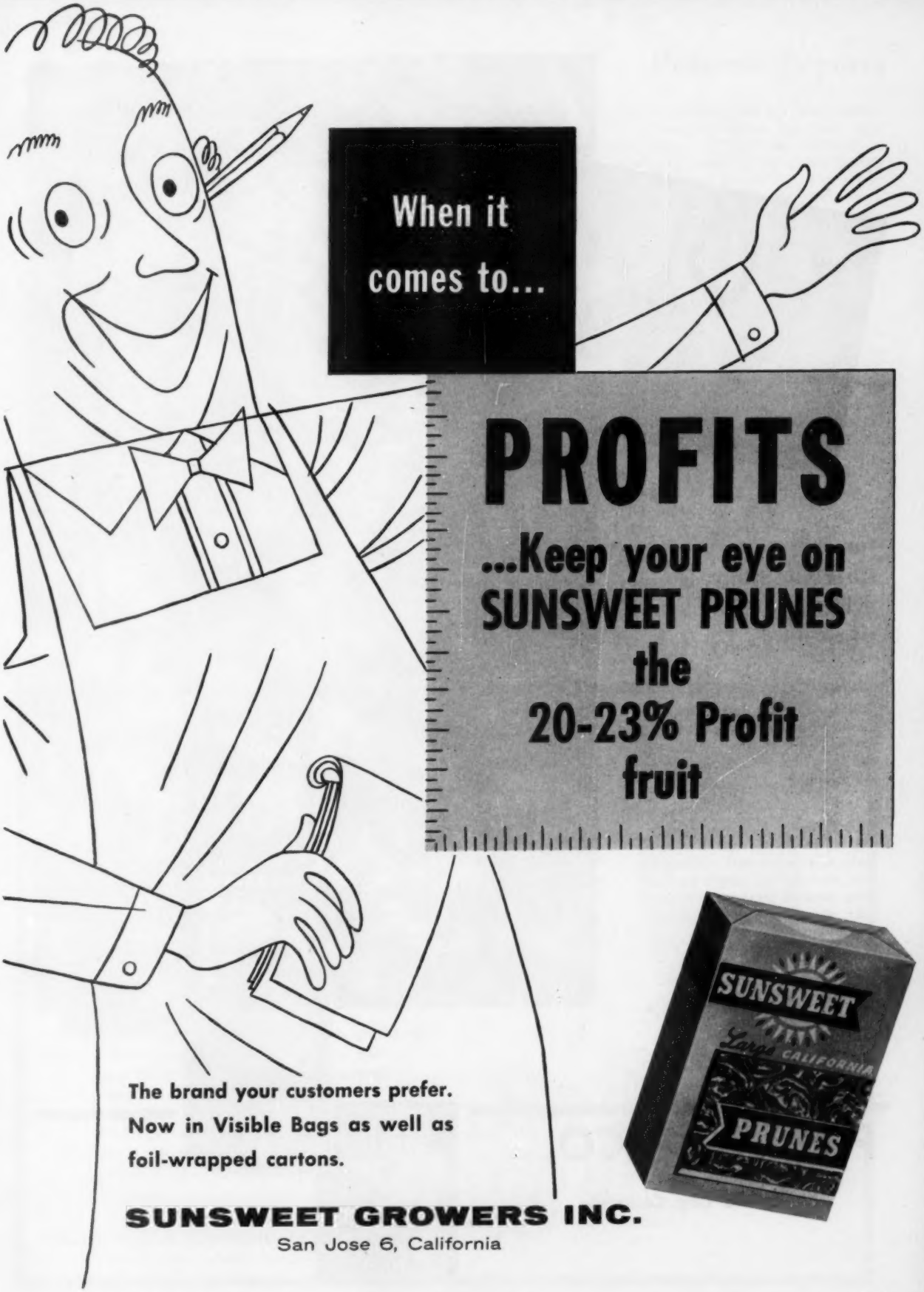
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Harter Packing Co., located in the midst of the peach orchards, selects the best available fruit, and freshly cans it by the most modern methods, to provide the maximum consumer acceptance.

Also available under our featured brands.

HARTER PACKING CO.

Yuba City, California

the 1958 outturn, 68,035,000 lbs. was straight horsemeat, and 1,607,634,000 lbs. was made up of all other types of packs.

The 1958 production of dry pet foods—biscuits, pellets and meal—went up even more sharply over the 1954 figure. In 1958, the Census Bureau says, 1,558,200,000 lbs. of these materials were produced, against 947,678,000 lbs. in the earlier year.

Particularly noteworthy has been the increasing variety of products available. Canned packs now include horsemeat, horsemeat with cereal, other meat with cereal, liver, liver with cereal, poultry, poultry with cereal, fish, fish with cereal, fish with meat and cereal, and products with kidney, heart and other variety meats included. The dry products are similarly varied, and also are obtainable in a range of particle sizes to suit cats, small and large dogs.

William B. Murphy

CANNED CONVENIENCE FOOD: More Growth

One of the significant developments in the U.S. convenience food business is the fact that, more and more, the housewife is coming to use these products as base ingredients. By skillfully blending two, three or four prepared or semi-prepared products, she's learned to create new and imaginative and different dishes that show her individuality while eliminating much of the labor.

As a result, we find these foods with built-in maid-service—originally conceived as an end product—being purchased more and more for ingredient usage. For example, according to President W. B. Murphy of Campbell Soup Co., one out of every six cans of soup is used in making another dish. The ratio is particularly high in the mushroom, celery and tomato varieties.

This, in turn, can mean more sales. "Our marketing people found that stores which display canned tuna and spaghetti together experience an average weekly sales increase of both that is quite remarkable," adds Mr. Murphy. "The housewife gets the suggestion to blend the two to achieve a new dish all her own. Incidentally, about 17% of all canned spaghetti has some-

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Plants: Turlock, Livingston, Calif.; Rovigo, Italy

thing—usually meat—added to it before it leaves the kitchen."

This development in usage is one affirmative answer to the question of whether or not convenience foods will continue to grow in production and in consumption. A second is that there are still many potential customers who are not using prepared products to any consequential extent.

Changes in living habits are proceeding at an accelerated pace currently, but one who has been trained in consumer research knows that these changes take a long period for deep penetration. Most people do not yet have outdoor barbecues or split-level homes, automatic dishwashers or a second automobile. It takes many years for living habit changes to become fully effective with a large proportion of the population, and this is especially true in the food business.

It can be expected, therefore, that many persons not yet adequately acquainted with convenience foods will become enthusiastic users of them in the years to come.

There is another answer to this question about the outlook for the canned convenience food business. Much of the food industry's progress from now on will depend on basic research developments in the life sciences. These are complex and difficult subjects; they are just beginning to yield up some of their secrets. Compared to the physical sciences, they are in their early stages because of their greater difficulty.

Today food's basic research effort is getting more and more attention, according to Mr. Murphy. By 1963, it is estimated that the food and kindred products industry will spend about 40% more for research than it did in 1959. This is a far greater increase than the average for all U.S. manufacturing industries. In addition, substantial research is being carried on by the government and at colleges and universities, and by other agencies. The Nutrition Foundation alone has 54 research projects underway, supported by industry. Such effort is certain to result in foods which are better than those now being marketed in the United States.

These are three reasons why those in the convenience food field have to believe there is ample room for progress. "We estimate the growth rate for convenience foods between now and 1970 will be more than double the growth rate for foods in general," concludes Mr. Murphy.

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They're chiefly concerned with careful quality control, of course. But their insistence on quality helps demonstrate again and again that canned foods are good foods. Today Mrs. America firmly believes that fact, thanks to half a century of proof produced by all conscientious members of the industry.

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CALIFORNIA PACKING CORPORATION
Packers of DEL MONTE Brand Foods

PICKLES: Mechanization Is Next Goal of U.S. Industry

By L. EVERT LANDON, President
Nalley's, Inc.,
and President,
National Pickle Packers Assn.

Nineteen-sixty has developed some very fine increases in sales of pickles throughout the United States and the industry goes into its 1960 intake period with very modest inventories of fresh pack and brine stock. While the midwest experienced a larger than normal receipt of raw materials last year, sparse intake in other sections has permitted some readjustment of brine stocks, and with healthy sales prevailing nation-wide, ample space is available for the expected 1960 volume.

Agricultural labor continues to exert a very important influence in the pickle industry. With the U.S. Department of Labor seemingly determined to impose minimum rates on migratory labor and with the unionization of agricultural labor making progress in

L. EVERT LANDON

California, it becomes evident that agricultural labor, particularly picking labor, will influence stronger prices for green cucumbers.

Mechanization of picking has not yet become a reality in the pickle industry, although there are some pilot machines in the field this year. Further research work is necessary to produce cucumber vines that will lend themselves to mechanical harvesting, before it seems likely that mechanical harvesters will be completely successful. This appears to be the only answer to the pickler's raw material problem of keeping his principal material costs at a reasonable level. With its perfection, mechanical harvesting will bring the natural phenomen of larger concentration of acreage, increased yield, and more mechanical handling of the product after it is harvested.

Pickles play an exceedingly important part in the average diet—more than is commonly supposed. To maintain their position among other similar foods, the matter of cost must be carefully regulated. The industry has done an exceptionally good job of publicizing its product to the public, and the public response has been gratifying. It remains now for the industry to mechanize, to improve its efficiency in production and marketing.

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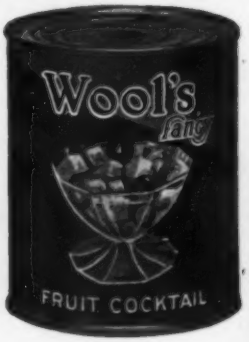

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GENERAL SALES AGENT

112 MARKET STREET, SAN FRANCISCO

SUtter 1-0245

CANNED MEATS: 1960 Pack Continues 15-Year Growth

By JOHN H. EHRENFELD
Manager, Canned Meat Dept.
Libby, McNeill & Libby
and President,
Natl. Meat Canners Assn.

JOHN H. EHRENFELD

Total production of canned meats this year has been running about 5% over the corresponding period in 1959.

If production continues at approximately the same rate as it did in the latter half of 1959, the 1960 total will establish an all-time high of production of meats in a can for commercial sale.

Most of the popular items in the extensive canned meat line have shared in the increase. Production of canned hams has gained substantially over the previous year or any other year. Chili, spaghetti products and nationality foods continue to be growing commodities.

Manufacturers of canned meat products feel that this steady growth over the last 15 years has come about for a number of reasons, most important of which are better quality, and increased advertising and promotion of the products. Several of the retail market studies which have come out in the last two years have helped emphasize to retailers the greater profit possibilities of canned meats over other grocery items.

The most recent—the Dillon Study by *Progressive Grocer*—indicates that while canned meats are near the bottom of the list in terms of space allocated, they rank tenth out of 38 grocery groups in terms of sales per linear feet. The canned meat section is one of the most profitable, ranking eighth in this category.

The Dillon Study further showed that in addition to shelf movement, many items, including beef stew and hash, respond particularly well to end displays, boosting sales 2,100% over normal unit sales.

Canned meats sell well throughout the year. The top promotional time for cold served items is, naturally, summer, when quick snacks, picnics and out-of-door meals enter customers' meal plans. Holidays and home entertainment add year-round sales balance.

The industry is doing a great deal of research and development work with canned meats at the present time. Many new items are in the research kitchens... items which offer greater

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convenience and economy to the homemaker. These new products, together with the upgrading of quality and flavor of current items, should guarantee for the canned meat industry the life blood it needs for continued sales growth.

A change in the federal regulations making it unnecessary for the industry to process certain products (in containers weighing under three pounds) to complete sterility, opens the way for the manufacture of certain products with substantially improved taste characteristics. A few of these items are currently being market tested; more are expected in the near future.

Looking ahead to 1961, the industry recognizes the fact that total production of pork will be down materially from the 1960 level; however, this doesn't necessarily mean that the production of canned pork products will show a similar decline. If the interest of the public and the trade in canned meats continues to grow, the industry will draw a larger percentage than normal from the total pork supply.

Supplies of canning beef are expected to continue at a high level in 1961, close to that prevailing in 1960.

SPICES: Upward Sales Trend Continues

By HOWARD C. WOLF
Manager of Purchasing
McCormick & Co., Inc.
and President,
American Spice Trade Assn.

During this past year, Americans have continued to show their new taste for seasoning. One nationwide survey reported spicy barbecue sauces and spices in general to be the fastest growing food products in grocery store sales today. The sauce sales were shown to be gaining at the rate of 22% a year, and packaged spices exhibited a 19% rise, while foods in general increased only 5%.

Another survey — this among a group of the leading spice packaging companies—added still more testimony to the rising consumption trend. The experience of these companies showed an average 319% sales increase within the past 10 years. Included in the figures were such startling individual product gains as 4600% for oregano;

HOWARD C. WOLF

3000% for basil; 1600% for marjoram; 1300% for sesame seeds; 800% for tarragon; 700% for curry powder; 500% for both cinnamon and caraway seeds and 400% for chili powder.

Much of the credit for this expanded market, in my opinion, must go to the energetic program of research and public relations sponsored by our association. Within the past few months, for example, our research committee has released a series of approved procedures for analyzing spices which should be of great interest to canners and packers. By using these standardized methods for determining the quality factors in spices, large spice buyers and their suppliers will be able to "talk the same language" in specifications and bids. All 21 different procedures are outlined in the book, "Official Analytical Methods of the American Spice Trade Association," which is available at $5 a copy from our office at 82 Wall Street, New York 5, N. Y.

In general, the world's spice producing areas were able to offer the growing U.S. market a good supply picture during 1959-60. The major exception was pepper, which on the strength of smaller crops and political unrest in the Far East experienced a sudden increase in price. In the latter part of 1959, it became evident that the Sarawak (Borneo) crop was considerably smaller than in the past, and that supplies from Indonesia were going to

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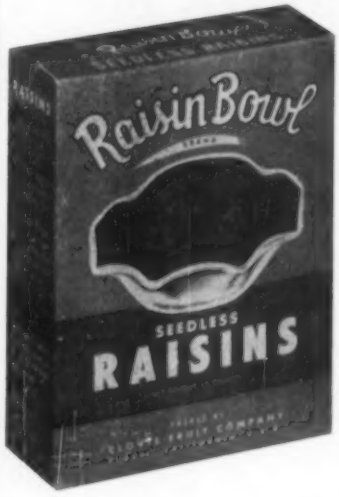

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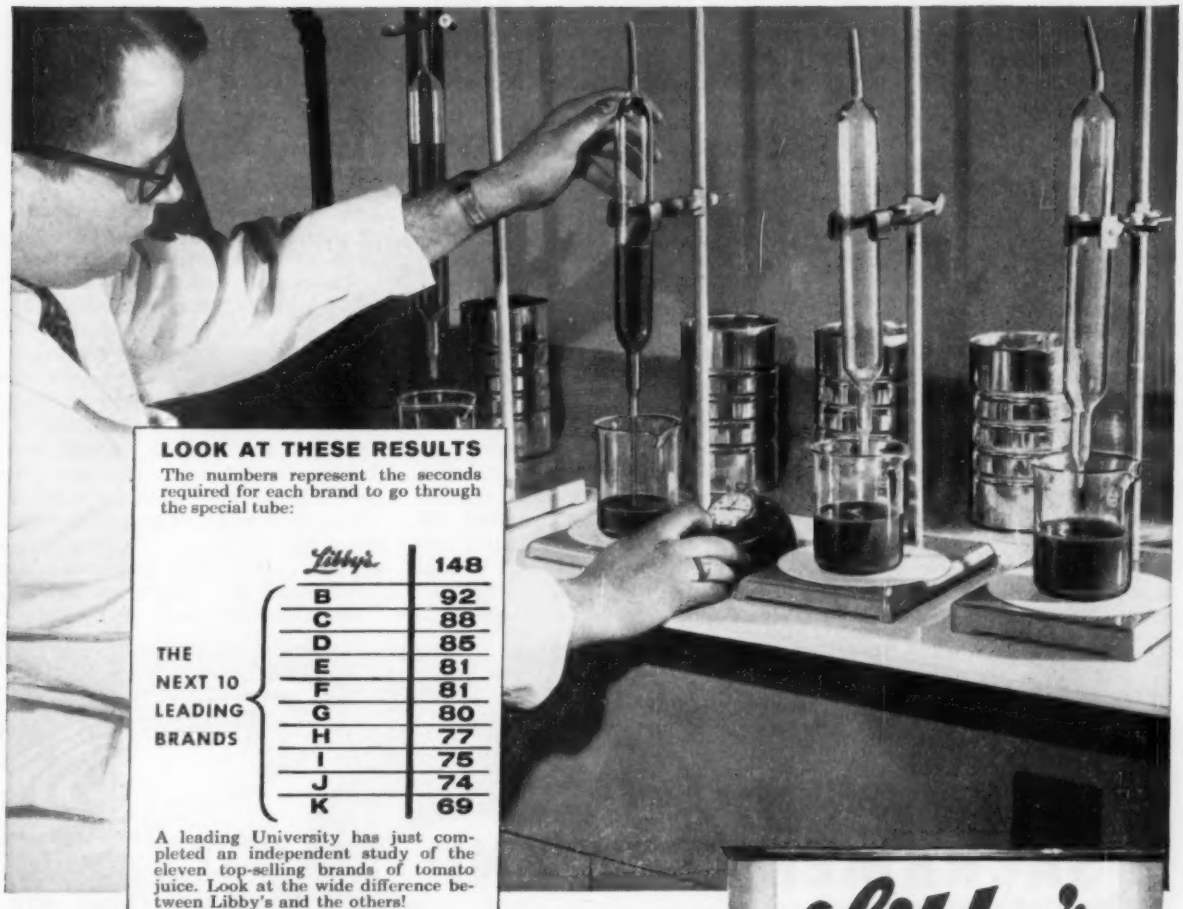

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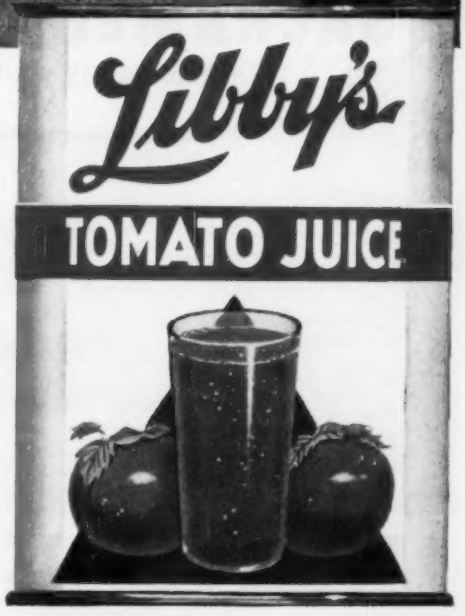

Libby, McNeill & Libby, 200 S. Michigan Ave., Chicago 4, Ill.

be curtailed. Coupled with this was heavier buying in the world pepper market on the part of Iron Curtain countries. Within a few months, the wholesale price in New York had doubled, and at points during the past year it has been as much as triple the 1959 low.

At this writing, it is impossible to predict the outlook for 1961. Accurate crop information from Asia is dificult to obtain, and the political picture is anyone's guess. Peaceful conditions in the Orient will help us keep the spice supply lines in good order, but if the situation in any of a number of areas deteriorates, the effects will be quickly felt on the market here.

A bright note, of course, is that India's pepper production continues good. India is the leading pepper producing nation, and while its crop is far from sufficient to meet world demand by itself, its pepper quality is excellent, its government one of the most stable in Asia, and its economy highly export-minded.

The unrest in Indonesia also affects cinnamon (cassia), nutmegs and mace. However, we are now able to import the top grade of cinnamon (the Saigon variety) from Vietnam (the non-Communist sector) of Indo-China, and the West Indies are continuing to make excellent recovery in their nutmeg and mace production. (West Indies nutmegs and mace were all but erased from the market after a severe hurricane in 1955.

Elsewhere, other commodities are in normal supply and the industry as a whole looks to a fine year ahead.

CANNED FISH: Tuna Pack Up as Other Varieties Decline

By J. R. BARRY
Calif. Marine Curing & Packing Co., and President, Calif. Fish Canners Assn.

The 1950-60 period in the fish canning industry is best characterized as being a period of short pack of all major canned fish items excepting canned tuna.

At the close of 1959, canned tuna sales in the United States, including imports of 2½ million cases, approximated 17 million cases, contrasted with sales in 1950 of approximately 8 million cases. Thus far, in 1960, sales of canned tuna have continued their upward climb. Production is expected to keep pace with sales, while imports of canned tuna will be about the same as in 1959, about 2½ million cases.

The most dramatic news of the tuna industry has been the technological advance in the catching of tuna by the domestic fleets. Prior to 1959 about 80% of domestic tuna was caught by the "clipper" or live bait fleet based at San Diego, California. A technological breakthrough occurred through the introduction of nylon nets and the power block, which caused a number of bait boat vessels to convert to purse seine type fishing in early 1959. The success of these newly converted seiners resulted in a rush to convert almost all suitable vessels of the clipper

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fleet, so that by the end of 1960 there will be left in the fleet only a few bait boat vessels; these will largely be craft too small or too old to justify the cost of conversion.

The outlook for the 1960 pack of California sardines is unfavorable and should compare with the short pack of 1959.

While the salmon pack, principally reds, will show a substantial increase over 1959, canned salmon will still be in comparatively short supply. The canned shrimp pack to date is trailing a poor pack of last year, as is the current pack of Maine sardines.

On the whole, 1960 probably will represent a repeat of 1959 insofar as canned fish is concerned—short packs in all species except canned tuna and a substantial volume increase in it.

MACARONI PRODUCTS: Promotion Leads Upswing

By EMANUELE RONZONI, JR.

Ronzoni Macaroni Co., and president, National Macaroni Manufacturers Assn.

EMANUELE RONZONI, JR.

Despite increased competition from every type of food, consumption of macaroni, spaghetti and egg noodles held steady in 1959 at 7.3 pounds of product for every person in the country. There has been an upward trend in consumption since the end of World War II.

The industry believes that one of the primary reasons for increased acceptance of macaroni products is the availability of a good supply of high quality durum wheat which is the principal ingredient used in the manufacture of macaroni, spaghetti and egg noodle products. There has been concerted effort on the part of the macaroni industry to encourage the growers of this wheat to produce sufficient quantities of quality product. In the past year the growers themselves have organized to promote marketing both at home and abroad through a growers' association and state wheat commissions.

Also contributing to increasing consumption is the sound advertising carried on by macaroni and noodle manufacturers. Through the National Macaroni Institute and the Durum Wheat Institute of the Millers National Federation, an excellent job of publicity and promotion has been done in the consumer and institutional fields.

There is wider acceptance of the fact today that well balanced diets are needed for good health and that cereals should be included as basic foods. In continuing to improve quality of our products and communications with the consumer, we confidently look for sales and production to continue their upward trend.

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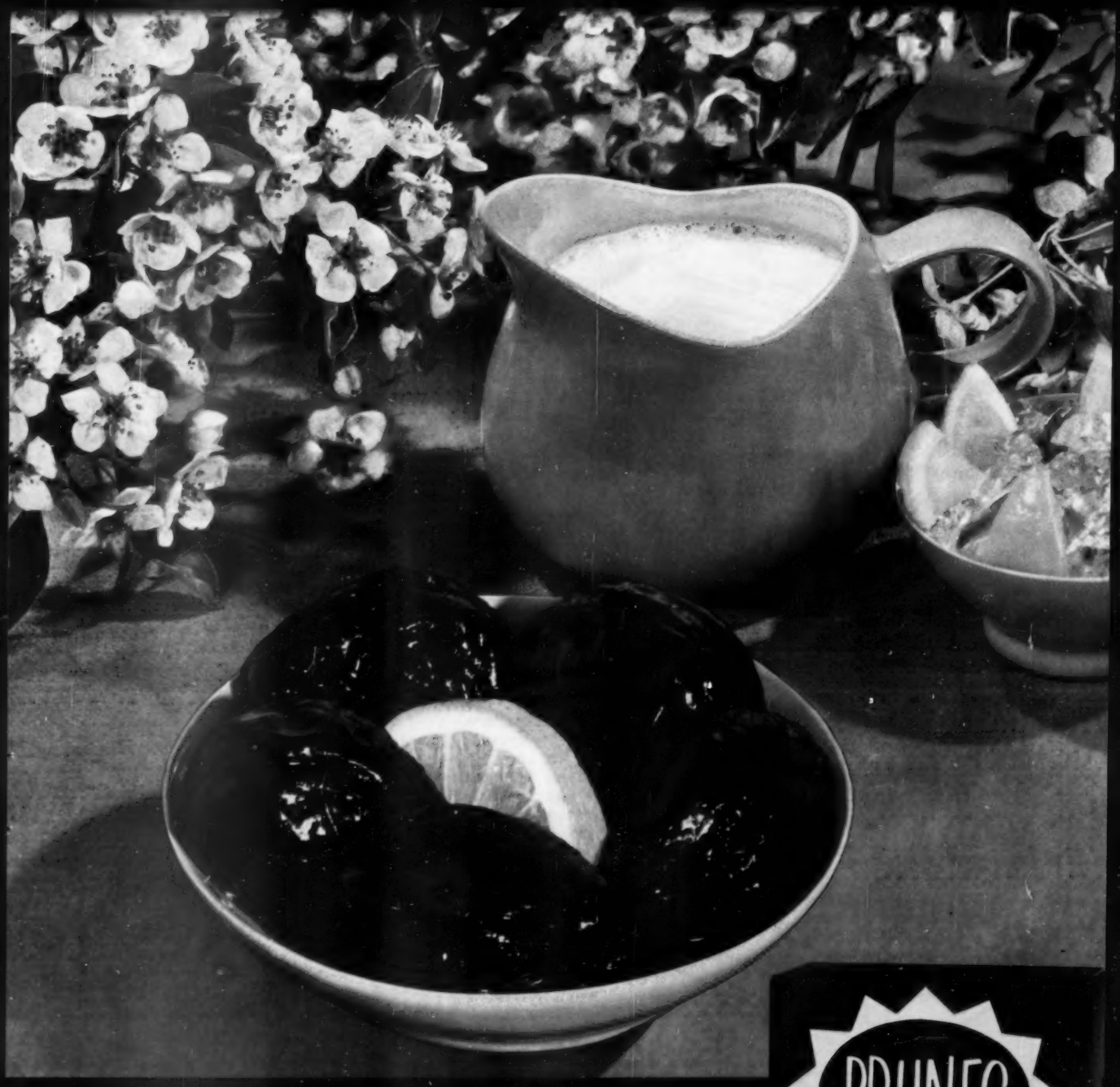

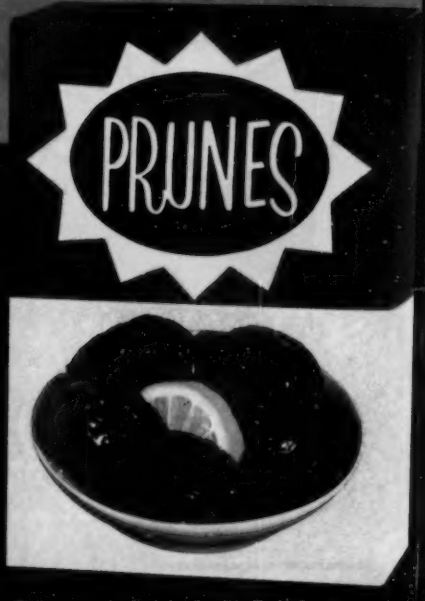

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CANNED FRUITS: 1959-60 Packs, Shipments Set Record

By the Staff of CANNER/PACKER

More canned fruits were packed, and shipped, in the 1959-60 season than in any other marketing year in U. S. history. A record-breaking total of over 102 million cases (24/2½ basis) was put up by U. S. canners, and it is estimated that almost that exact amount went into consumption in the year which ended late this summer. In 1958-59 the total pack was 89.6 million cases, and movement was 90.4 millions.

California cling peaches occupied the No. 1 spot in pack and movement, as they have for many years. Some 21½ million cases were packed in 1959, and nearly 22 millions have left canners' warehouses, including several million to export buyers. The pack compared with 17½ million cases in 1958.

Hawaiian pineapple (including the Calpak operation in the Philippines) ranked second in output and movement. The Hawaiian-Philippine pack totaled 14.1 million cases in 1959-60, and shipments (including imported supplies) added up to 15.2 millions. In addition, U. S. mainland canneries turned out a pack which may have amounted to several million cases, on the basis of data reported in the 1958 U. S. Census of Manufacturers. In 1958-59, the Hawaiian-Philippine output was 14.2 million standard cases.

California canned cocktail held third place, as it did in 1958-59. The 1959 pack was 12.1 million standard cases, and the movement was 12.2 millions in 1959-60. The 1958 pack was only 10.7 millions.

Applesauce was the fourth ranking U. S. canned fruit pack in 1959-60, as it was in other recent seasons. The bulk of the pack, as always, was put up in the East, with the Pacific Coast second and the Midwest supplying practically all of the balance. The total pack was 11.4 million standard cases in 1959-60, up from 10.4 millions in 1958-59. Shipment in 1959-60 was approximately on a par with the pack.

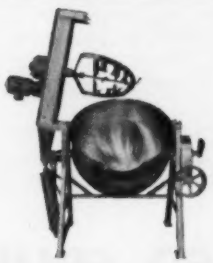
Pears and freestone peaches were fifth and sixth in 1959 production. The pear pack of 9½ million cases was up from 7.9 millions in 1958, and movement gained from 8.3 million cases in 1958-59 to 9.3 millions in 1959-60. The freestone peach outturn was up moderately, from 7.3 million standard cases in 1958 to 7.8 millions last year. Shipments were at the 7.1-million-case level in both marketing years.

Other varieties — apples, apricots, berries, cherries, figs, fruit salad, grapefruit, other citrus, olives, purple plums, miscellaneous fruits—also showed increased production in 1959. The pack of all these combined was 26.1 million standard cases this past season, against 21.6 millions in 1958-59. Sweet cherries, grapefruit and olives declined, berries and miscellaneous fruits were unchanged, but all the others gained.

The outlook is for a slightly smaller output in 1960-61, in total. Smaller packs are expected for apple products, red cherries, pears and purple plums, with perhaps some reductions in other items.

Stocks at the beginning of the 1960-61 marketing year were a shade above the totals at the beginning of 1959-60 and 1958-59, but movement is reported above that of earlier seasons.

STYLE SA MIX COOKER Standard SA Mix Cooker has either single motion or double motion agitator with or without hydraulic lift. With hydraulic lift agitator lifts easily and smoothly out of cooker. Sizes range from 30 to 500 gallons.



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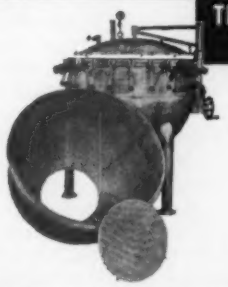

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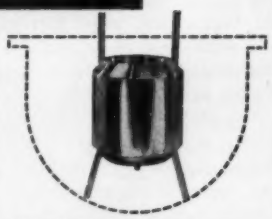

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BREAKFAST FOODS: Growth Promoted by Four Factors

By the Staff of CANNER/PACKER

U.S. production and consumption of cereal breakfast foods is continuing to gain, according to latest available data. From a total of 743 thousand short tons packed in 1947, the nation's output has grown to 789 thousand tons in 1954 and to 833 thousands in 1958, according to U.S. Bureau of the Census.

Production of ready-to-serve cereals increased between 1954 and 1958 in all major categories. Corn flakes and similar items went up from 275 to 311 million lbs.; wheat flakes and related packs grew from 332 to 346 million lbs.; outturn of other ready-to-eat breakfast cereals went up from 320 to 395 million lbs.

Packs of foods requiring cooking before serving showed important gains in the oatmeal group, which went up from 450 to 482 million lbs. Farina and other wheat items needing cooking, however, declined from 141 to 133 million lbs. Comparative data on other to-be-cooked cereals, in terms of pounds, are not available, but dollar figures point to a decline in this group also.

Several factors have contributed to growth in demand for breakfast cereals, in addition to the rise in the nation's population. One has been increasing recognition of the desirability of a reasonably hearty meal with which to start the day. Breakfast food packers have strongly merchandised this point, and their products have been well-suited to provide a basic component of such a meal quickly and inexpensively.

A second favorable factor has been development of a constant parade of new and varied foods. Some have represented changes in form, or in texture. Many, however, have been flavored—with maple or chocolate or fruit flavors—to appeal to a specialized segment of the population.

Thirdly, greater attention is currently being paid to the nutritional values of such cereals. In some instances this has represented simply a clear statement on the package of the vitamin and mineral and protein values already available in the grain. In others, however, the original nutrients have been augmented, with appropriate label or package declaration.

Finally, the packaging of breakfast foods has been significantly improved in recent years. Most such cereals tend to draw moisture to them; they have been protected from this hygroscopic tendency by improved moisture-vapor barriers in the form of films, papers and foils, often coated or laminated.

DRIED FRUIT: Better Weather, Bigger Pack

By the Staff of CANNER/PACKER

After the rugged year of 1958, when rain brought disaster to the raisins and unfavorable weather and other factors cut back the production of prunes and apricots and peaches, the 1959 season was a welcome relief.

Growing conditions in California and the Pacific Northwest were favorable to all varieties of dried fruits except figs. As a result, the 1959-60 pack has been estimated at approximately 438 thousand tons, up sharply from the less than 323 thousands produced in 1958-59.

The output of evaporated apples was approximately the same in the two years, and the fig pack in California dropped from 24 to 19 thousand tons. But the dried apricot output went up from 3 to 8 thousand tons, dates gained from less than 20 thousand tons to nearly 23 thousands, peaches climbed from less than 5 thousands to 8 thousand tons, pears moved up from 1.1 to 1.8 thousands.

Prunes increased from 1.0 to 5.5 thousand tons in Washington-Oregon, and from 96 thousand to 140 thousand in California. The California raisin output was up from 157 thousand to 217 thousand tons. And the production of dried currants gained from 3.0 to 3.5 thousand short tons.

Foreign dried fruit packs also were

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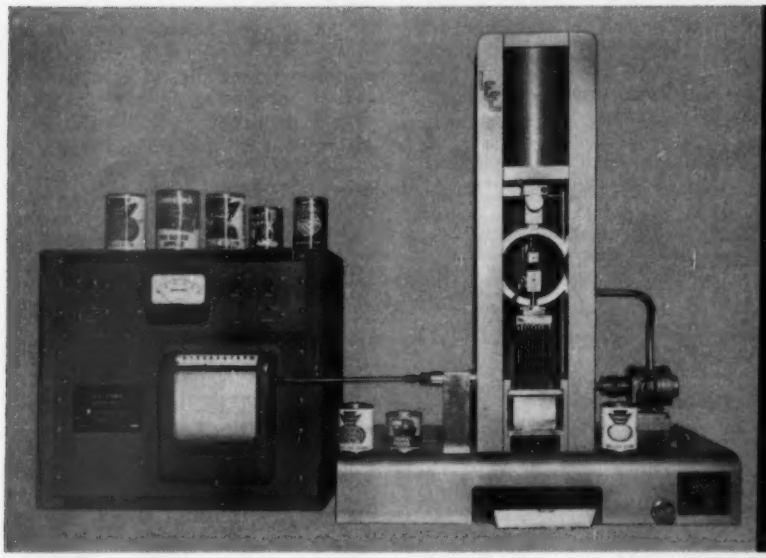

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larger in 1959, but only moderately, going up 75 thousand tons from 961 to 1,036 thousands. As a result, the known world total of dried fruits (U. S. packs plus foreign exports of dates and foreign packs of other varieties) rose from 1,283,500 short tons in 1958 to 1,474,100 (est.) in 1959.

The United States continues to export more dried fruit than its imports by a considerable margin, but the margin was reduced in the 1958-59 season, last for which complete data are available. In that year U. S. packers shipped only 62.2 thousand short tons overseas, while imports ran to 30.6 thousand tons (both reflecting the small U. S. 1958 crops). In the 1957-58 season, exports had been 111.8 thousand tons, and imports only 27 thousand.

FROZEN CONVENIENCE FOODS: Still Booming

By the Staff of CANNER/PACKER

When a predecessor of this journal made its first survey of the frozen convenience or prepared food business, back in 1943, industry members reported an output of 1,000,000 lbs. in 1942 and 20,000,000 lbs. in 1943. While this was a very small pack, even in those two years the remarkable growth potential was revealed. Any business that could increase its production, and sales, twenty-fold in a single season, would seem to have deserved watching.

The business has amply justified that opinion. The best available information indicates that the 1959 pack was close to 1,700,000,000 pounds (1.7 billions), nearly 25% of the total U. S. output of frozen foods last year.

Bakery products constitute the largest single branch of the prepared frozen food industry. The 1959 pack is estimated at 650 million lbs., of which 150 millions were dessert pies, and 500 millions were made up by packs of cakes, cookies, breads, rolls, waffles, sweet goods, etc. While the 1959 data are estimates, U. S. Census Bureau reports actual packs of 137.8 million lbs. of pies and 448.2 millions of other frozen bakery items in 1958.

Potato products are second in total outturn. The total pack rose from 269 million lbs. in 1958 to 371 millions in 1959, according to Natl. Assn. of Frozen Food Packers. In terms of products, 322 million lbs. of the 1959 pack were French fries, 4 millions were whipped and diced items, and nearly 45 millions were puffs, patties, shredded, etc. By containers, 170 million lbs. were put up in retail packages of one lb. and under, mainly in 9-ounce, and the other 201 millions in institutional and bulk.

Prepared poultry dishes are third in total volume, the pack having been 190 million lbs. in 1959, according to best-available estimates. The pie pack is believed to have been 160 million lbs. (against 152.8 millions reported by U. S. Bureau of the Census in 1958), and the remaining 30 million lbs. was made up of a la king, etc.

Better Labeling and Casing

Series E Labelers

For glass and other cylindrical containers. Adjustable for all sizes from 112 to 403 dia. by 112 to 710 high and from 200 to 611 dia. by 200 to 708 high. Has sight-feed paste pot and hi-temp glue pot. Continuous label feed optional.

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A lower priced labeling Machine for moderate speed operations. Has all the versatility of Model E and is adjustable to a wide range. Can be supplied for regular wrap-around or spot labels.

Container Feed Tables

Eliminate excessive labor costs by automatically accumulating and placing containers in a single or double line.

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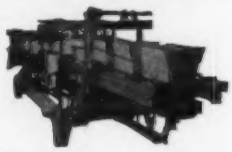

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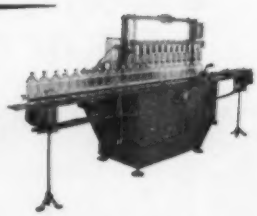

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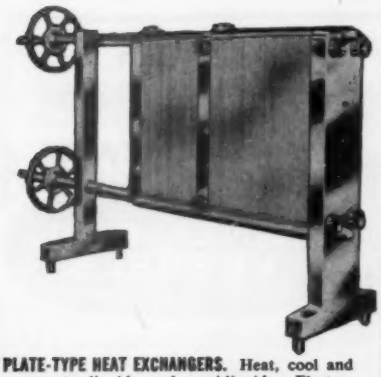
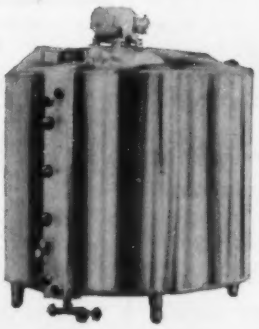


PLATE-TYPE HEAT EXCHANGERS. Heat, cool and regenerate liquids and semi-liquids. Electro-polished knob-type plates set up three-dimensional turbulence for high heat exchange rates without excessive over-all pressure. Port openings in plates extra large to minimize pressure loss. Closed circuit processing. Three models for capacities from 60 to 60,000 g.p.h. Write for Bulletin G-560.



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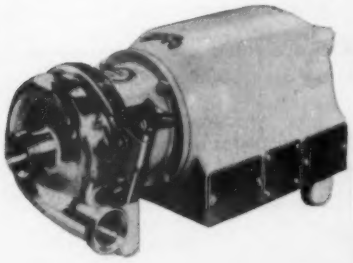
FITTINGS, VALVES AND STAINLESS STEEL TUBING. A complete line of fittings and valves for cleaned-in-place or take-down lines. All stainless steel. Flexlok tygon hose connections for connecting tygon hose to sanitary fittings. Stainless steel tubing in 1" through 4" sizes, polished to 180 grit finish, 10' and 21' lengths. Corrosion resistant. Will not release catalytic or oxidizing agents. Write for Bulletin G-559.



"FLEXFLO" SANITARY CENTRIFUGAL PUMPS. Type 316 stainless steel. Four models with ¼ through 30 h.p., capacities from 2000 to 210,000 pounds per hour. Entire product end of pump quickly and easily taken apart for cleaning without tools. New hinged clamp ring for protection against distortion through abusive use — assures continued perfect alignment. New design shaft for "O"-ring impeller locking. New balanced rotary seal. Involute design. Flexflo design allows setting the outlet in any position. Flexflo centrifugal pumps also available in industrial unpolished models. Write for Bulletin G-567.

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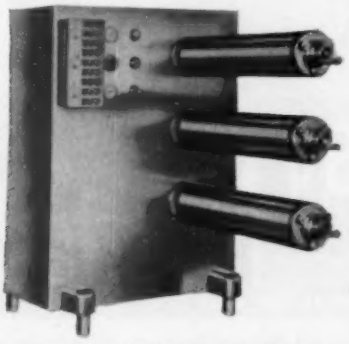

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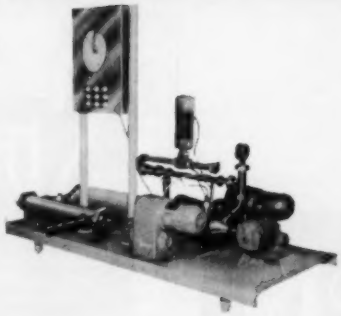

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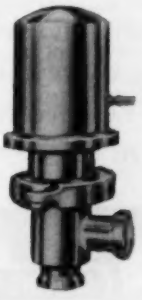

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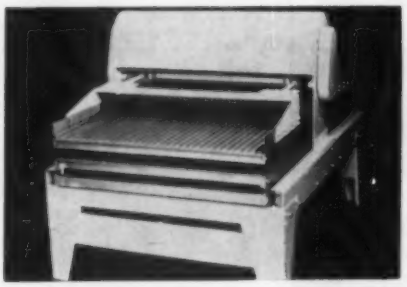

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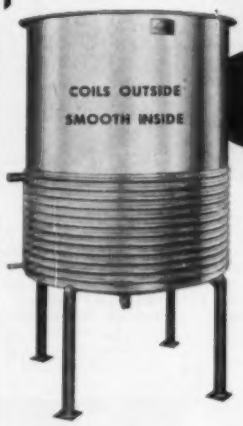

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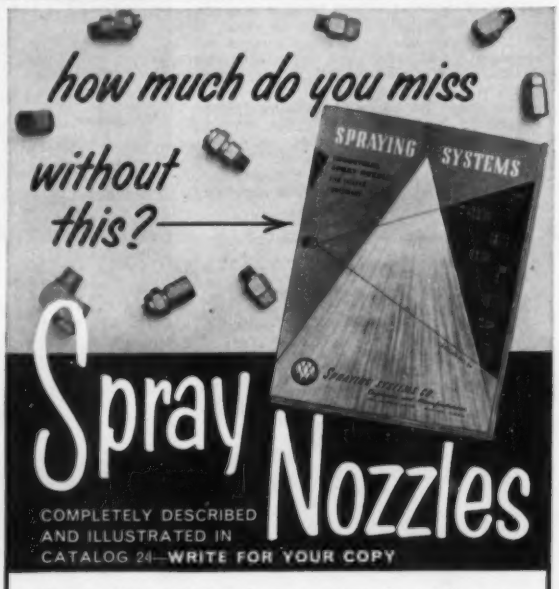

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FOOD ADDITIVE LAW: Its Problems and Its Benefits

By GEORGE P. LARRICK
Commissioner of Food & Drugs
*U.S. Dept. of Health, Education and Welfare**

The food additives law was needed because there were so many chemical materials being used in foods that had not been studied sufficiently to make sure they were safe, and the law did not require an additive to be proven safe before it was used in products sold to the public. So Congress enacted a plan of regulation to better protect the consumer. It divided these food chemicals into two main classifications; those which qualified scientific experts recognize as safe, or which had been officially cleared as safe before the new law was passed, and those which are not generally recognized as safe because they require further study or testing, or for the simple reason that information about them has not been disseminated.

Congress allowed a total of 2½ years of time for such study or testing, including a one year time extension for study of specific materials which are probably safe; in other words, which there is no reason to suspect will endanger public health. The last deadline expires on March 6, 1961, and at the present time over 1,200 materials are continuing to be used under these time extensions and their future status must be determined by March 6, 1961. By that time they must either be classified as safe, based on information made available to us by the manufacturers or users of these additives, or their use will become illegal until such time as the required proof of safety has been provided and found satisfactory by the Food and Drug Administration.

Approximately 660 materials have been placed on various lists of chemicals that are generally recognized as safe for food use or that we propose to list as safe. I say "approximately" 660 because there are some duplications where chemicals are listed for different uses. Up to the present time 63 applications for formal clearance of new food additives have been filed and 16 regulations have been issued. In total these figures show that the number of chemicals being used in food processing or packaging is much greater than any of the previous estimates.

My attention has been called recently to the terrible mass poisoning case in Morocco where 10,000 people were paralyzed by a chemically adulterated cooking oil. I have been asked whether such a case could happen here in the United States. My answer is that it did happen over 30 years ago during prohibition days when thousands of people were paralyzed by drinking a bootleg beverage called "ginger Jake." This contained the same nerve-destroying chemical that was in the lubricating oil used to adulterate the vegetable cooking oil in Morocco. Today I think it is almost inconceivable that we could have a repetition of the Morocco case in this country. Of course, some kind of mass poisoning is always a possibility because the human element is involved. But I believe that the new food additive law has very greatly reduced the risk of such a case in the United States.

GEORGE P. LARRICK

Now what can we do to assure continued consumer confidence in the food supply? First of all, safety in the use of food chemicals is a must if the food industry is to continue to enjoy complete consumer confidence. Pesticides and food additives must be used carefully, according to the appropriate label directions and regulations.

Second, I believe that we must tell the people all the facts about modern foods. That includes telling them about food additives, what they are and what they do, and about the law that protects the public. We have just issued a booklet, "What Consumers Should Know about Food Additives" that may be helpful in this connection.

Third, I believe that everyone who is concerned with food—the farmer, the processor, the manufacturer, the retailer, the advertiser, the food editor and the law enforcement official—must so operate that consumers will not have cause to lack confidence in American food products. This is a joint responsibility. It is the concept of playing fair with the consumer, and carrying out the plan of control that Congress has enacted to protect the consumer. It means using pesticides and food additives correctly. It means packing wholesome products in honest packages. It means using labels that are designed to give consumers the information they need and that the law requires. It means advertising and promoting food products in a completely truthful way.

Almost every day we have some interesting new question or problem in connection with food additives.

Recently a question came to us about a kind of padding material that is used to line the picking baskets for harvesting fruits, especially soft fruits that bruise easily. We decided that this did not involve any food additive problem. Likewise, there was no problem about using this material to pad the inside of shipping boxes or line the inside of freight cars. But there was one use that did raise a question. Often fruits and vegetables are put through a cooling process before shipping—in which the packing boxes or crates are sprayed with water. Was there anything in this padding material which would be extracted by the water, and thus come in contact with the fruit? This is something that does need to be looked into, and that is being done.

Many chemicals are used in making paper products of all kinds. Under the law, any of these chemicals which are questionable and which may get into food are food additives and must be cleared as safe. Large quantities of scrap paper are re-used to fabricate some kinds of food packages. This raises the question of the source of the scrap. Paper previously used to package chemicals would of course not be suitable. Our experts have concluded there is no safety problem if

*For delivery to Food Editors of Leading National magazines and newspapers, at Denver, Colorado, June 27, 1960.

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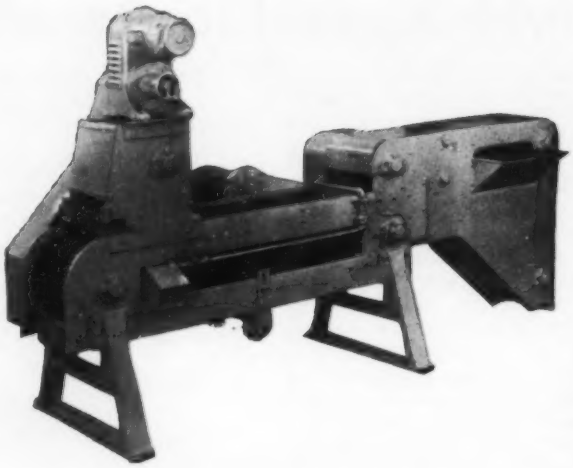

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the scrap paper is from a source that is acceptable and if there is an impervious coating or liner between the food and the package.

Live steam is much used for cooking in many food packing plants and institutions. Sometimes it is introduced directly into the cooking kettles. But if the water has been treated with a boiler compound, which is very necessary in many localities, we have a food additive question. Is it a volatile compound? If so, it definitely could be a food additive. In our regulations we are allowing traces of certain boiler water compounds in food—up to ten parts in a million parts of food, but not in dairy products. Why is this? Because milk has a special place in the diet of infants and invalids, and we want to keep it as free of any contamination as possible.

Clearance of a food additive does not mean that the material may then be used without restriction in any food product. An additive regulation specifies the amount, and the kinds of food, in which the additive may be used, but other sections of the law and regulations also apply. For instance, standardized foods may contain only those additives that are specifically allowed by the standards for these foods.

Vitamin and mineral food supplements are subject to the food additive law, like other food products. The other day a question came up concerning an inert filler that was put in as a carrier for one of the vitamins. There was ample information to prove that it did not interfere with the absorption or potency of any of the vitamins. But was it generally recognized by qualified experts as safe in food. This is the question which must be resolved. There are many materials in this category—we have no reason to doubt that they are safe and they probably are, but we must know.

A large and important group of food additives is the emulsifiers, which are used to ensure smoothness and uniformity in many food products. Another important group is the antioxidants which prevent rancidity and the development of stale flavor in shortenings, baked goods, breakfast cereals, and other foods. These are developments of modern food technology which have helped to make possible the multitude of mixes and ready-to-serve foods which now line our grocery shelves. The food additive law was not designed to rule out the addition of chemicals to our food supply. On the contrary, it recognizes that in this day and age chemicals serve a useful purpose in our food supply, but there must be a sound basis for using them, with assurance that they are safe.

A few weeks ago a foreign chemical firm wrote to us for information. They sent their catalog of hundreds of different food materials—flavors, colors, preservatives, emulsifiers, etc., with this request: "Please cross out any items not allowed in the United States." Well, you can see from what I have said that it is not quite so simple. We do not have all the answers, and it will take time to get them.

A lot of people are quite confused about food additives. I am reminded of a letter sent to us the other day by one of our publisher friends. A lady had written to the editor about her experience with a baked potato. She said she had cut the ends of the potatoes before she put them in the oven, to let out the steam. Nevertheless, when she took them out one of the potatoes exploded and went all over the kitchen. How fortunate, she said, that the potato exploded *before* they had a chance to eat it, because these *food additives* must indeed be very powerful to make a potato do something like that!

For the record, I suppose I should say we do not know of any potato additive that is an explosive. Generally a chemical used on potatoes would be a pesticide under the law and not a food additive, because it would be on a row agricultural commodity. But pesticides, too, must be checked for safety before they are marketed, so perhaps this would not make so much difference to the average consumers. The point I want to make is that consumers—the public—are very much interested in this whole subject of the foods they eat, just as they are interested in the medicines they take when they are sick and the cosmetics they use to promote attractiveness. We know this from the attention the press is giving to developments in this field and from the letters and other evidence of popular interest. In my 37 years of experience, I have never seen a time when the public was more interested in pure foods and drugs than they are today.

But most people still think about foods in the frame of reference of the past. "Like mother (or grandma) use to make" is still a popular ideal about food, and I, for one, hope that it always will be. Technology, however, has not only caught up with us, but

has gone far beyond us. We have to catch up with change—not only by keeping our law and regulations up to date, but also to catch up in public understanding of the changes that have made it necessary to enact such a statute as the food additives law.

It is not surprising that many people are seeking information about a subject like food additives. First of all, it is something new to them, the idea that chemicals are suitable and useful ingredients of food. They are not listed in recipes or in cookbooks. The public has little opportunity to learn much about commercial food production. Yet food is a very personal matter. People want to know, and they have a right to know, what they are eating.

Today the public is being barraged with misleading information representing two extreme points of view. On the one hand are the writers of sensational articles and books who hold that because many chemical materials are used in food growing and processing it must be concluded that Americans are being poisoned on a wholesale basis. This is a false conclusion. The author of one recent book has attempted to prove the point by assembling a large number of quotations. These are frequently taken out of context, are often incomplete, and many of them quote as "experts" people who are not really experts. But the result may be impressive to the uninformed.

On the other side of the picture are the people who are challenging the correctness of actions that have been taken under the law to protect the public. They disagree with the judgment of responsible scientists concerning the quantity of a material that may be harmful. They ignore the fact that Congress has changed the law to require that food materials be proved safe *before* they are put in the food supply, rather than be proved harmful *after* being put in the food supply. They do not seem to realize that questions of safety must be resolved in favor of the consumer. Some food industry spokesmen are even saying that the food additive law is stifling progress and shackling industry.

Is it any wonder that consumers are confused when they are exposed to such inaccurate and conflicting sources of information?

Now what are the facts? As we see it there is no question that the great majority of manufacturers produce food that is pure and unquestionably safe, and the great majority of food distributors keep it wholesome as it moves to the consumer.

Our inspectors and chemists are continuously investigating food production and examining interstate shipments of food to be sure they meet the safety requirements of the law. If they do not, we remove the food from the market through Federal court action.

We check only a very small percentage of the food shipments made each year. We need to check more to give the consumer the assurance she wants and deserves. However, Congress has been increasing our funds and our laboratory facilities recently to do a better job. The safety of the food supply is improving.

From time to time we will learn of food additives which cannot be cleared as safe, and the use of these materials will have to be stopped by action under the law. However, the number of such instances will be small and when they occur they should not cause us to get panicky. They should be taken as evidence that the law is working for our protection.

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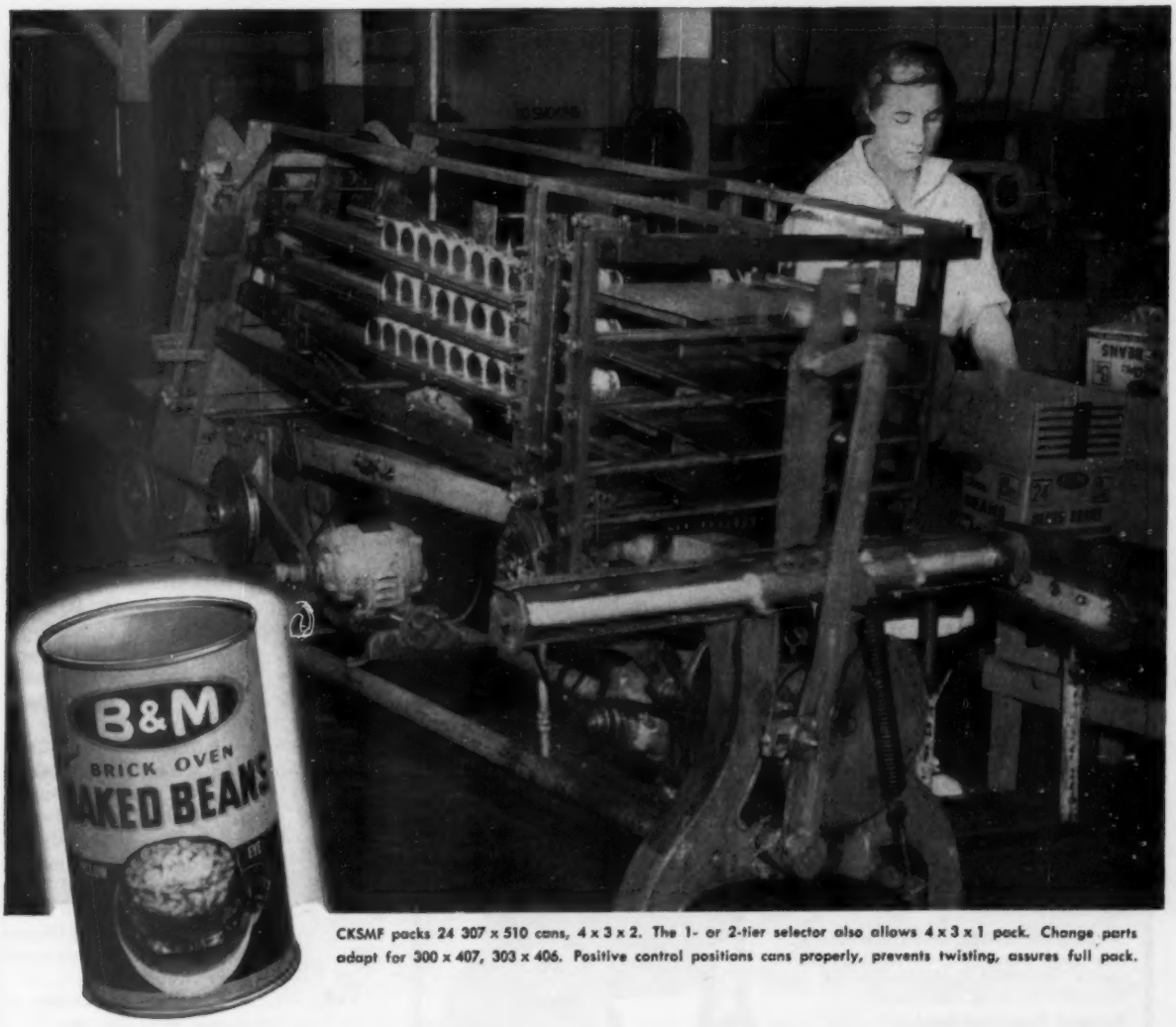

CKSMF packs 24 307 x 510 cans, 4 x 3 x 2. The 1- or 2-tier selector also allows 4 x 3 x 1 pack. Change parts adapt for 300 x 407, 303 x 406. Positive control positions cans properly, prevents twisting, assures full pack.

B&M speeds production..cuts operating costs 20% with Crompton & Knowles Can Packers

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C&K not only provides extensive services to the can packing industry, but also manufactures a complete line of high-speed WRAP-KING wrapping machines to handle both simple and complex shapes. For any packing or wrapping problem, you'll do well to investigate C&K. Get full details, including leasing plans, by writing Crompton & Knowles Packaging Corporation, Holyoke, Massachusetts.

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INDUSTRY AWARDS

The major awards given in the processed foods industry are listed below. The description of each of the awards is followed by the year, the name of the recipient, and a brief description of him.

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Sponsored by the Nutrition Foundation. The award is made to a person who has made a distinguished contribution to public health through some aspect of nutrition.

1948—Fred C. Blanck, H. J. Heinz Company, chief research chemist.

1949—Clarence Birdseye, Birdseye Packing, frozen food research.

1950—Carl R. Fellers, Massachusetts State College and Experiment Station, professor of food technology.

1951—Samuel C. Prescott, M. I. T., professor of food technology.

1952—Fred W. Tanner, University of Illinois, professor of bacteriology.

1953—Charles N. Frey, director of Fleischmann Labs.

1954—Edwin J. Cameron, National Canners Assn., director of research labs.

1955—William V. Cruess, University of California, professor of food technology.

1956—Gail M. Dack, University of Chicago, professor of bacteriology.

1957—Elmer M. Nelson, U. S. Food and Drug Administration, chief vitamin division.

1958—Bernad L. Oser, Food Research Lab, director.

1959—Samuel Lepkovsky, University of California, poultry research, zoology

1960—Arnold H. Johnson, University of Wisconsin, professor of dairy technology

Nicholas Appert Award

Made to honor a person for preeminence in the field of food technology.

1942—William V. Cruess, University of California, professor of food technology.

1943—Samuel C. Prescott, M. I. T., professor of food technology.

1944—C. A. Browne, U. S. Department of Agriculture, Washington, D. C., agricultural chemist.

1945—A. W. Bitting, National Canners Assn., and Glass Containers Mfg. Assn., research, consulting food technologist.

1946—C. H. Bailey, University of Minnesota, cereal chemistry.

1947—C. Olin Ball, National Canners Assn., American Can Company, Owens-Illinois Glass Co., technical research on heat sterilization.

1948—C. A. Elvehjem, University of Wisconsin, biochemistry.

1949—Roy C. Newton, Purdue, professor of physical chemistry.

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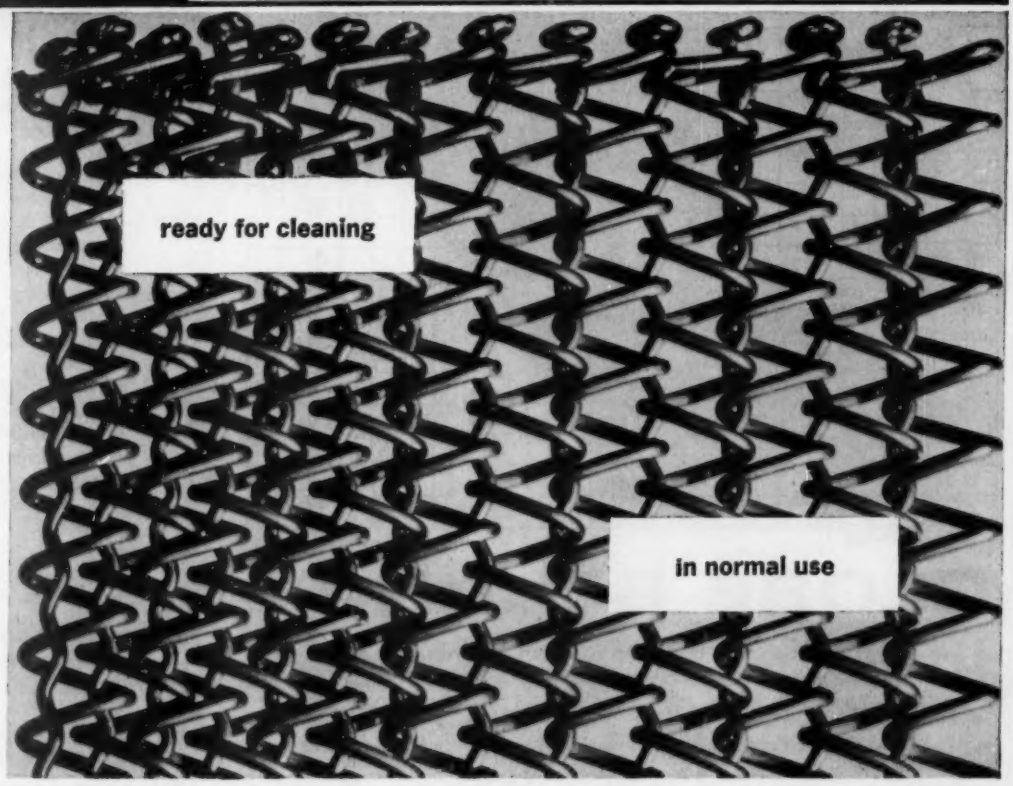

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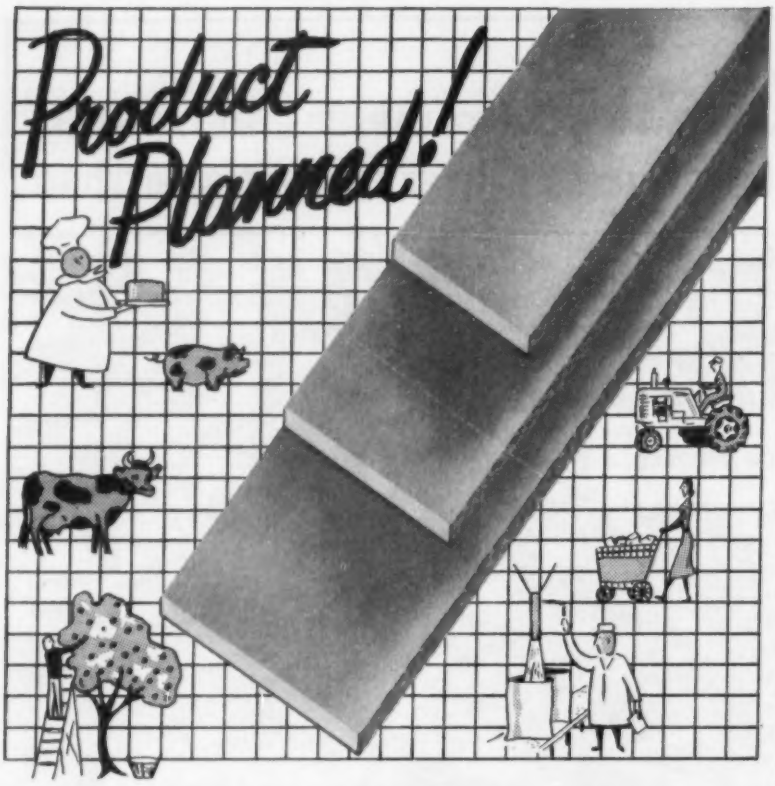

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1950—Thomas M. Rector, General Foods Corporation, food preservation and processing.
1951—A. E. Stevenson, Continental Can Company, technology department.
1952—Edward M. Chace, U. S. Department of Agriculture, citrus by-products and fruit and vegetable chemist.
1953—Victor Conquest, Armour & Company, director of research.
1954—Charles N. Frey, director of Fleischmann labs.
1955—Charles G. King, Nutrition Foundation, scientific director.
1956—Bernard E. Proctor, M. I. T., professor of food technology.
1957—Emil M. Mrak, University of California, dairy, professor of food technology.
1958—William F. Geddes, University of Minnesota, professor of agricultural biochemistry.
1959—Berton S. Clark, American Can Company, research chemist.
1960—Ernest H. Wiegand, University of Oregon, professor of food technology.

'49'ers Service Award

Given as an acknowledgement of outstanding service to the canning industry by the '49'ers.

1954—Samuel C. Prescott, M. I. T., professor of food technology.
1955—John Charles Walker, University of Wisconsin, plant pathology, disease resistant varieties.
1956—Louis Gardner MacDowell, Florida Citrus Commissioner, research director.
1957—Carlos Campbell, National Canners Assn., executive secretary.
1958—C. Olin Ball, National Canners Assn., American Can Company, Owens-Illinois, heat sterilization research.
1960—Fred A. Stare, Columbus (Wis.) Canning Co.

International Award

Made annually by the Australian sections of the Institute of Food Technologists to a person judged to have made outstanding efforts in the exchange of ideas or in better international understanding.

1956—Robert S. Scull, U. S.
1957—Laurence V. Burton, U. S.
1958—Henri Cheftel, France
1959—Ross A. Chapman, Canada
1960—James R. Vickery, Australia

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Processed Food Merchandising Events Scheduled for 1960-61 Marketing Year

Special weeks and months to boost sales of canned, dry, frozen and glassed foods. Sponsors offer many merchandising materials

In the marketing year starting September 1, 1960, U.S. processed food trade associations and merchandising organizations will conduct some 49 sales events on behalf of their products. This is revealed by a survey made by CANNER/PACKER, and summarized in the tabulation on this page.

In addition to the specific events, some of the agencies also are conducting year-around campaigns. Thus the whole year will afford opportunities for canners and packers, brokers and jobbers, wholesalers and chains, supers and other retailers, and suppliers to participate with their individual promotion efforts.

To aid interested individuals and companies to make the most of these events, most of the sponsors—in addition to investing heavily in advertising — are offering point-of-purchase materials, and some also are providing direct-mail stuffers, advertising mats and other promotional assistance.

Readers are invited to contact the sponsors of events of interest to them.

Sept. 1-30: Natl. Better Breakfast Month (Cereal Inst., Inc., 135 S. LaSalle St., Chicago 3, Ill.).

Sept. 15-24: International Tuna Week (Theodore R. Sills & Co., 39 S. LaSalle St., Chicago 3, Ill., for International Tuna Fish Assn. of Tokyo).

Sept. 20-Oct. 31: Chicken and Cling Peaches HOT (Cling Peach Advisory Bd., 153 Market St., San Francisco 5, Calif.).

Sept. 24-25: Cranberry Harvest Festival (Rupert V. Wunschel, Edaville Railroad, South Carver, Mass.).

Sept. 25-Oct. 1: 100% Pure Syrup Week (100% Pure Maple Syrup Inst., 308 Furman St., Brooklyn 1, N. Y.).

Sept. 29-Oct. 29: Del Monte Round-Up (Calif. Packing Corp., 215 Fremont St., San Francisco 19, Calif.).

Oct. 1-2: Cranberry Harvest Festival (Rupert V. Wunschel, Edaville Railroad, South Carver, Mass.).

Oct. 1-31: October Cheese Festival (Amer. Dairy Assn., 20 N. Wacker Dr., Chicago 6, Ill.).

Oct. 1-31: Canned Salmon-Lemon Loaf Month (Canned Salmon Inst., 200 Coleman Bldg., Seattle 4, Wash., and Sunkist Growers, 720 E. Sunkist St., Ontario, Calif.).

Oct. 1-31: October Rice Harvest Festival (Rice Council for Market Development, 2171 Portsmouth, Houston 6, Texas).

Oct. 1-31: Shrimp Fiesta (Shrimp Assn. of the Americas, Div. of Natl. Fisheries Inst., 1614 20th St., N.W., Washington 9, D. C.).

Oct. 9-15: International Pizza Week (International Pizza Club, P.O. Box 213, New York 1, N. Y.).

Oct. 13-22: Natl. Apple Week (Natl. Apple Week Assn., 1302 18th St., N. W., Washington 6, D. C.).

Oct. 15-Nov. 30: Kraut-Pork 'N Apple Dinner Season (Natl. Kraut Packers Assn., 202 S. Marion St., Oak Park, Ill.).

Oct. 17-23: Fish'n Seafood Parade (Fish'n Seafood Promotions, Div. of Natl. Fisheries Inst., 1614 20th St., N.W., Washington 9, D. C.).

Oct. 20-29: Natl. Macaroni Week (Natl. Macaroni Inst., 139 N. Ashland Ave., Palatine, Ill.).

Oct. 24-29: Natl. Honey Week (American Honey Inst., 114 N. Carroll St., Madison, Wis.).

Oct. 24-31: Natl. Popcorn Week (Popcorn Institute, 333 N. Michigan Ave., Chicago, Ill.).

Nov. 1-13: Asparagus Week (New Jersey Asparagus Industry Council, Inc., Rene Gossiaux, Jr., Exec. Dir., Canterton, N. J.).

Nov. 15-Dec. 31: Holidays Are Pickle Days (Natl. Pickle Packers Assn., 202 S. Marion St., Oak Park, Ill.).

Nov. 16-Dec. 31: Fruit Cocktail and Dairy Foods (Cling Peach Advisory Bd., 153 Market St., San Francisco 5, Calif.).

Jan. 1-Feb. 28: Louisiana Yam Supper Season (La. Sweet Potato Commission, P. O. Box 132, Opelousas, La.).

Jan 26-Feb. 4: Natl. Kraut and Frankfurter Week (Natl. Kraut Packers Assn., 202 S. Marion St., Oak Park, Ill.).

Feb. 1-Mar. 31: Good Breakfast Month (Amer. Bakers Assn., 20 N. Wacker Dr., Chicago 6, Ill.).

Feb. 3-18: Take Tea & See (Tea Council of the U.S.A., 16 E. 56th St., New York, N. Y.) POP

Feb. 15-Apr. 2: Pickles and Fish are Flavor Pals—Lenten Promotion (Natl. Pickle Packers Assn., 202 S. Marion St., Oak Park, Ill.).

Feb. 15-Apr. 2: Fish and Seafood Lenten Promotion (Fish'n Seafood Promotions, Div. of Natl. Fisheries Inst., 1614 20th St., N.W., Washington 9, D. C.).

Feb. 20-26: Natl. Cherry Week (Natl. Red Cherry Inst., 747 Deerfield Rd., Deerfied, Ill.).

Mar. 5-11: Natl. Peanut Week (Natl. Peanut Council, Dupont Circle Bldg., Washington 6, D. C.).

Mar. 19-25: Natl. Rice Week (Rice Council for Market Development, 2171 Portsmouth, Houston 6, Texas).

Apr. 1-30: Cereal & Milk Spring Festival (Cereal Inst., Inc., 135 S. LaSalle St., Chicago 3, Ill.).

Apr. 1-Nov. 30: Strawberry Point-of-Sale Promotion (Calif. Strawberry Advisory Bd., P. O. Box 57, Santa Clara, Calif.).

Apr. 2-8: Honey for Breakfast (Amer. Honey Inst., 114 N. Carroll St., Madison 3, Wis.).

May 13-20: Natl. Frozen Food Week (Natl. Frozen Food Distributors Assn., 60 E. 42nd St., New York 17, N. Y.).

May 18-May 27: Natl. Pickle Week (Natl. Pickle Packers Assn., 202 S. Marion St., Oak Park, Ill.).

June 1-Aug. 31: Kraut Salad Season (Natl. Kraut Packers Assn., 202 S. Marion St., Oak Park, Ill.).

June 15-24: Natl. Mayonnaise & Salad Dressing Week (Mayonnaise & Salad Dressing Mfrs. Assn., 333 N. Michigan Ave., Chicago 1, Ill.).

July 1-31: It's National Ice Tea Time (Tea Council of the U.S.A., 16 E. 56th St., New York, N.Y.).

July 1-31: Natl. Picnic Month (American Bakers Assn., 20 N. Wacker Dr., Chicago 6, Ill.).

July 1-Aug. 31: PIC-L-NIC Time (Natl. Pickle Packers Assn., 202 S. Marion St., Oak Park, Ill.).

Aug. 1-31: Natl. Sandwich Month (Wheat Flour Inst., 309 W. Jackson Blvd., Chicago 6, Ill.).

Aug. 17-26: Spanish Green Olive Week (Spanish Green Olive Commission, 55 E. Washington, Chicago 2, Ill.).

Sept. 1-30: Natl. Better Breakfast Month (Cereal Inst., Inc., 135 S. LaSalle St., Chicago 3, Ill.).

Oct. 1-31: October Cheese Festival (Amer. Dairy Assn., 20 N. Wacjer Dr., Chicago 6, Ill.).

Oct. 1-31: Yambilee (La. Sweet Potato Commission, P. O. Box 132, Opelousas, La.).

Oct. 16-22: Fish'n Seafood Parade (Fish' n Seafood Promotions, Div. of Natl. Fisheries Inst., 1614 20th St., N.W., Washington 9, D. C.).

Oct. 19-28: Natl. Macaroni Week (Natl. Macaroni Inst., 139 N. Ashland Ave., Palatine, Ill.).

Oct. 20-Dec. 25: Traditional Dessert Promotion (Amer. Bakers Assn., 20 N. Wacker Dr., Chicago 6, Ill.).

Oct. 23-28: Natl. Honey Week (Amer. Honey Inst., 114 N. Carroll St., Madison 3, Wis.).

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Cultivated Blueberries
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Cut Wax Beans
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Raisin
Apricot

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U. S. Fruit Acreage—Crops—Crop Utilization—Grower Prices

Year	Apple	Apricot	Cran-Berry	Straw-berry	Other Berry	Sweet Cherry	Red-tart Cherry	Dates	Figs	Grape	Grape-fruit	Lemon	Orange	Tange-rine	Olive	Cling Peach	Free Peach	Pears	Plums, Prunes	TOTAL
U. S. Bearing Acreage—Thousands of Acres—Processing and Fresh Market																				
1941	919	74	25	171	110	106d	d	3	36	628	187	56	504	25	27	41	571	181	216	3,880
1942	906	73	25	156	110	106d	d	3	36	628	188	57	517	23	27	42	590	179	212	3,690
1943	889	73	25	109	90	103d	d	4	35	627	189	60	525	23	27	43	613	177	210	3,822
1944	885	73	25	77	88	102d	d	4	35	625	189	63	531	23	28	43	614	175	208	3,788
1945	878	73	26	75	85	100d	d	4	35	627	191	66	542	24	28	44	555	174	208	3,735
1946	872	73	26	90	82	99d	d	4	35	627	193	67	548	24	27	46	462	174	206	3,657
1947	865	73	26	112	80	97d	d	4	35	630	194	65	556	24	28	46	364	174	207	3,580
1948	850	70	27	117	78	97d	d	4	33	625	193	65	565	24	27	46	287	172	202	3,482
1949	834	60	27	116	75	96d	d	4	31	605	169	58	557	24	28	46	268	170	180	3,348
1950	817	52	26	126	74	95d	d	4	29	615	170	54	562	24	27	46	224	168	170	3,283
1951	761	50	26	139	73	95d	d	4	27	619	136	54	562	24	28	46	200	160	160	3,164
1952	704	49	25	123	72	94d	d	5	26	590	142	55	567	24	28	47	198	160	150	3,059
1953	644	48	24	100	72	93d	d	5	25	570	145	55	569	24	27	47	195	160	150	2,953
1954	627	46	23	96	71	93d	d	5	25	500	151	56	588	24	28	44	193	155	175	2,900
1955	572	43	22	101	71	93d	d	5	24	485	154	60	599	22	28	45	193	155	175	2,847
1956	549	47	22	116	70	93d	d	5	23	485	157	51	564	21	28	47	192	153	165	2,808
1957	540	46	21	125	70	92d	d	5	22	475	155	51	588	21	28	46	191	151	162	2,789
1958	551	47	21	111	70	92d	d	4	21	475	151	50	560	21	29	47	191	149	160	2,756
1959	553	47	21	108	70	94d	d	4	21	480	157	52	565	21	28	49	200	149	158	2,772
U. S. Commercial Crop—Thousands of Short Tons—Rounded to Nearest 10,000 Tons																				
1941	2,930	210	40	230	90	80	80	10	120	2,730	1,560	460	3,390	90	60	330	1,480	720	660	15,270
1942	3,040	230	40	240	90	90	110	10	100	2,400	1,980	590	3,540	190	60	420	1,180	750	620	15,680
1943	2,090	100	30	120	80	70	40	10	130	2,700	2,190	440	4,290	160	60	350	680	590	700	14,830
1944	2,910	350	20	80	60	80	110	10	130	2,700	2,030	500	4,510	180	40	490	1,380	770	600	16,950
1945	1,600	190	30	90	70	100	50	10	110	2,770	2,490	570	4,210	190	30	470	1,439	800	780	15,990
1946	2,850	340	40	130	80	110	120	20	130	3,140	2,330	550	4,770	210	50	550	1,440	820	790	18,470
1947	2,710	200	40	160	80	80	90	10	130	3,020	2,430	510	4,670	180	40	510	1,320	840	670	17,690
1948	2,140	250	50	190	80	80	130	20	100	3,060	1,790	400	4,240	200	60	500	960	610	620	15,480
1949	3,220	200	40	160	80	140	110	10	90	2,620	1,420	450	4,380	230	40	580	1,070	810	630	16,270
1950	2,990	220	50	200	90	80	160	20	80	2,680	1,820	530	4,960	220	40	470	730	700	500	16,540
1951	2,670	180	50	210	90	70	160	20	100	3,380	1,590	510	5,060	200	60	590	930	710	640	17,220
1952	2,270	180	40	210	90	100	120	20	100	3,160	1,500	500	5,100	220	60	460	1,040	720	480	16,370
1953	2,290	240	60	220	90	90	130	20	80	2,690	1,900	640	5,450	230	30	540	1,010	680	550	16,940
1954	2,680	160	50	210	80	80	110	20	90	2,560	1,650	550	5,620	230	50	460	1,030	720	600	16,950
1955	2,570	280	50	230	80	110	150	30	90	3,240	1,780	520	5,710	210	40	540	700	730	520	17,580
1956	2,420	200	50	280	70	70	100	20	90	2,910	1,760	640	5,720	90	70	650	1,030	790	690	17,650
1957	2,840	190	50	280	90	90	150	20	80	2,600	1,550	670	4,750	100	40	540	940	770	570	16,320
1958	2,990	110	60	270	90	90	100	20	80	2,950	1,700	670	5,270	200	70	510	1,200	710	360	17,450
1959	2,920	230	60	240	90w	80	140	30	60	3,140	1,720	680	5,540	190	30	610	1,180	740	440	18,120
U. S. Commercial Crop by Regions—1958—Thousand Short Tons																				
East	871	.....	35	19	d	7	32	.....	.....	128	.....	.....	.....	.....	.....	d	178d	20	.....	1,290
South	514	.....	.....	51	d	.....	.....	.....	.....	15	1,568	.....	3,937	202	.....	d	148d	42	.....	6,477
Midw.	209	.....	17	35	d	15	58	.....	.....	68	.....	.....	.....	.....	.....	d	460d	31	7	920
West	1,399	108	6	202	90d	66	14	19	81	2,719	136	672	1,334	.....	70	505	415	612	354	8,762
TOTAL	2,993	108	58	267	90w	88	104	19	81	2,950	1,704	672	5,271	202	70	505	1,201	705	361	17,449
U. S. Commercial Crop by Regions—1959—Thousand Short Tons																				
East	982	.....	32	16	d	8	31	.....	.....	120	.....	.....	.....	.....	.....	d	161d	18	.....	1,318
South	522	.....	.....	41	d	.....	.....	.....	.....	17	1,576	.....	3,984	194	.....	d	437d	27	.....	6,798
Midw.	514	.....	22	28	d	14	99	.....	.....	76	.....	.....	.....	.....	.....	d	124d	37	7	921
West	955	230	8	153	90d	56	7	26	64	2,926	146	685	1,559	.....	27	609	453	656	429	9,079
TOTAL	2,923	230	62p	238	90w	78	137	26	64	3,139	1,722	685	5,543	194	27	609	1,175	738	436	18,116
U. S. Crop Utilization—1958—Thousand Short Tons																				
Canned	472	71	35	1	19	16	48	.....	8	36	137p	.....	10	.....	34	469	206	358	22	1,942
Dry	110	16	.....	.....	.....	.....	.....	19	70	640	.....	.....	.....	.....	.....	.....	30	6	243	1,140
Frozen	65	4	.....	111	47	2	40	.....	1	24	180p	160w	2,700p	42p	.....	.....	33	.....	3	3,413
Misc. P.	304	.....	.....	a	a	30	1	.....	.....	1,681	457s	100w	771p	28p	35	.....	4	.....	.....	3,450
Fresh	1,958	13	23	155	24w	29	6	.....	2	528	900p	412w	1,790p	132	1	4	851	317	90	7,235
Unsold	84	4	.....	.....	.....	2	3	.....	.....	35	.....	.....	.....	.....	.....	32	77	24	3	264
TOTAL	2,993	108	58	267	90w	88	104	19	81	2,950	1,704p	672	5,271p	202p	70	505	1,201	705	361	17,449
U. S. Crop Utilization—1959—Thousand Short Tons																				
Canned	459	155	35p	1	18	11d	71	.....	5	37	132	.....	10	.....	20	553	210	383	24	2,124
Dry	91	45	.....	.....	.....	.....	.....	26	57	888	.....	.....	.....	.....	.....	.....	52	10	364	1,538
Frozen	102	4	.....	102	42	d	58	.....	.....	.....	178	200	2,580	46	.....	.....	38	.....	1	3,331
Misc. P.	361	.....	.....	16	10	39	1	.....	.....	1,647	516	138	909	26	6	.....	5	.....	.....	3,704
Fresh	1,892	28	27p	119	20	25	5	.....	2	554	885	346	1,986	119	1	3	802	318	42	7,079
Unsold	10	3	.....	a	a	3	2	.....	.....	13	11	1	48	3	.....	53	68	27	5	345
TOTAL	2,923	230	62p	238	90w	78	137	26	64	3,139	1,722	685	5,543	194	27	609	1,175	738	436	18,116
U. S. Average Growers' Price—For Processing—Per Ton																				
1951	$24	$115m	$290	$336	$274y	$290	$133	$105	$145m	$ 73m	$14v	$67v	$26v	$26v	$173	$77	$63m	$90m	$50m	.....
1952	45	93m	376	318	246y	165	117	100	135m	70m	20v	78v	31v	30v	103	65	55m	45m	51m	.....
1953	63	94m	290	330	296y	237	176	130	100m	106m	14v	50v	36v	31v	198	55	53m	63m	42m	.....
1954	52	102m	232	318	274y	270	206	94	105m	96m	18v	51v	36v	20v	166	55	53m	70m	46m	.....
1955	44	88m	200	334	242y	191	117	104	105m	88m	17v	60v	46v	37v	242	81	63m	68m	41m	.....
1956	67	112m	208	292	352y	255	160	105	104m	74m	24v	38v	39v	87v	178	71	62m	76m	45m	.....
1957	44	87m	236	186	254y	275	165	113	105m	88m	29v	29v	37v	57v	236	64	50m	60m	37m	.....
1958	37	137m	232	240	198y	316	163	116	110m	110m	a	a	a	a	102	65	49m	70m	89m	.....

a—not available. d—fruits or regions combined as indicated. m—does not include prices of fruits for drying. p—preliminary. v—prices for fruits for all uses. w—partially or wholly estimated. y—unweighted average of Washington-Oregon berries for all purposes. s—principally juices and juice concentrates, which are not included in Canned although largely packed in metal cans.

U. S. Vegetable Acreage—Crops—Crop Utilization—Grower Prices

Year	Asparagus	Lima Beans	Snap Beans	Beets	Broccoli u	Brus. Sprouts u	Cabbage	Carrots u	Cauliflower u	Corn	Cucumbers	Garlic u	Onion u	Sweet Peas	Sweet Potato u	White Potato u	Spinach	Tomatoes	Dry Beans r	Dry Peas r	TOTAL
U. S. Processing Acreage (Except as Noted)—Thousands of Harvested Acres																					
1941	60	63	89	18	9	a	23	65	30	445	110	4	101	361	731	2,693	30	445	2,019	291	7,587
1942	73	66	137	17	9	a	15	70	28	486	108	4	138	434	687	2,671	49	583	1,925	493	7,993
1943	70	61	162	18	12	a	14	96	27	510	85	3	113	434	857	3,239	43	524	2,362	795	9,425
1944	74	59	161	18	13	a	17	91	32	490	99	3	182	439	726	2,780	52	525	1,996	719	8,476
1945	78	60	129	18	14	a	23	97	35	487	101	3	144	454	646	2,664	45	515	1,487	518	7,518
1946	75	70	125	16	19	a	24	91	40	505	134	4	161	493	637	2,527	43	557	1,622	492	7,635
1947	69	83	104	10	16	a	10	81	35	495	127	3	121	429	547	2,001	24	500	1,778	513	6,946
1948	75	86	106	14	18	a	19	87	36	467	125	3	133	374	455	1,981	28	391	1,938	298	6,834
1949	86	115	126	19	40	5	18	93	34	461	136	3	123	387	472	1,755	40	325	1,885	354	6,477
1950	89	97	121	20	40	6	18	92	33	336	109	3	136	418	489	1,698	30	336	1,511	238	5,820
1951	93	107	121	17	36	6	15	73	29	436	143	2	124	476	284	1,386	33	347	1,423	341	5,455
1952	88	94	115	17	43	5	16	78	30	489	151	2	116	425	322	1,397	34	373	1,253	208	5,256
1953	89	111	149	18	43	6	17	81	30	503	146	1	132	431	343	1,536	31	305	1,379	258	5,609
1954	101	113	154	16	36	6	16	79	28	453	138	2	116	427	332	1,413	25	263	1,533	259	5,510
1955	116	101	134	18	40	5	13	79	29	390	125	3	114	435	341	1,414	31	331	1,502	281	5,502
1956	110	100	132	20	44	6	15	78	32	443	119	2	124	476	284	1,386	33	347	1,423	341	5,515
1957	105	91	153	17	39	6	11	72	33	442	129	2	111	455	281	1,383	33	305	1,379	272	5,319
1958	107	82	151	16	39	5	12	68	30	385	119	3	107	378	266	1,466	30	337	1,600	203	5,404
1959	111	78	165	14	41	6	10	66	27	419	10c	3	113	345	275	1,392	34	288	1,477	300	5,264
U. S. Processing Crop (Except as Noted)—Thousands of Short Tons																					
1941	64	38	147	134	24	a	211	516	164	1,138	197	8	781	346	1,719	10,671	74	2,689	855	173	19,949
1942	82	38	238	132	22	a	161	569	176	1,283	199	11	973	424	1,800	11,067	112	3,068	878	338	21,571
1943	80	28	265	139	28	a	107	826	172	1,171	150	6	784	413	1,856	13,767	93	2,530	972	501	23,888
1944	92	30	223	168	36	a	118	765	199	1,044	184	7	1,199	389	1,877	11,518	128	2,919	752	401	22,049
1945	100	35	213	185	35	a	233	888	228	1,139	192	8	942	497	1,685	12,582	115	2,545	598	268	22,488
1946	110	48	215	142	47	a	269	795	256	1,251	252	10	1,261	523	1,673	14,619	112	3,367	735	304	25,989
1947	91	57	173	76	35	a	72	667	236	1,097	245	9	918	435	1,365	11,670	53	3,229	791	290	21,502
1948	86	70	193	95	42	a	203	766	250	1,262	236	6	1,062	349	1,185	13,497	71	2,883	969	165	23,390
1949	106	95	264	154	92	3	177	727	253	1,408	272	7	980	347	1,240	12,048	117	2,469	993	146	21,918
1950	106	82	264	180	93	22	246	789	230	958	176	9	1,149	433	1,363	12,956	101	2,628	756	154	22,695
1951	105	95	274	154	82	26	184	717	226	1,198	275	7	1,002	512	800	9,789	151	4,258	791	177	20,823
1952	97	90	240	132	114	21	177	744	237	1,526	331	6	1,001	432	802	10,555	124	3,546	746	123	21,044
1953	94	108	319	165	108	34	221	766	225	1,514	327	5	1,263	465	950	11,584	120	3,268	825	153	22,514
1954	102	104	346	150	88	32	209	750	287	1,489	301	7	1,109	400	860	10,977	100	2,700	847	155	21,013
1955	129	89	306	144	105	23	161	715	228	1,174	312	11	1,071	456	1,047	11,352	130	3,278	832	126	21,689
1956	118	108	329	191	118	38	244	790	255	1,683	330	11	1,222	549	846	12,186	139	4,571	861	232	24,821
1957	114	93	361	164	93	31	170	715	238	1,525	370	10	1,212	558	837	11,977	140	3,315	781	166	22,870
1958	111	89	366	149	108	26	206	737	223	1,322	357	10	1,175	485	872	13,189	124	4,258	949	124	24,880
1959	118	83	369	142	113	30	141	681	206	1,579	335	14	1,278	471	935	12,150	151	3,538	910	219	23,463
U. S. Crop by Regions—1958																					
East	19	3	72	45	21	3	76	81	67	113	64t	.....	231	43	72	3,686	42t	596	67	.....	5,301
South	5	17	100	22t	6	.....	a	209	19	181t	81	.....	205	21	737	1,278	27	321t	.....	.....	3,229
Midwest	16t	27t	61t	65	.....	.....	86	86	16	825	154	.....	189	249	12	2,578	a	696	309	3	5,372
West	71	42	133	17	81	23	44t	361	121	203	58	10	549	171t	51	5,647	55	2,645	573	121	10,976
U.S.	111	89	366	149	108	26	206	737	223	1,322	357	10	1,174	484	872	13,189	124	4,258	949	124	24,878
U. S. Crop by Regions—1959																					
East	28	3	81	51	15	3	46	68	49	103	57t	.....	260	23	68	3,331	53t	417	42	.....	4,693
South	6	11	93	19t	6	.....	a	121	9	188t	68	.....	159	20	804	1,211	28	243t	.....	.....	2,986
Midwest	17t	30t	71t	52	.....	.....	50	74	8	1,043	162	.....	219	199	13	2,384	a	790	358	4	5,474
West	72	39	124	20	92	27	45t	418	140	245	48	14	640	229t	50	5,224	70	2,088	510	215	10,810
U. S.	118	83	369	142	113	30	141	681	206	1,579	335	14	1,278	471	935	12,150	151	3,538	910	219	23,463
U. S. Crop Utilization—1958 (Canned Includes Glass and Specialty Packs)																					
Can	99	23	209	149	.....	.....	206	58	.....	1,088	357g	.....	a	348	111	143	66	4,258g	340w	a	7,517
Dry	.....	y	.....	.....	.....	.....	.....	a	.....	.....	.....	10u	110w	y	.....	1,149	.....	a	609	124	2,053
Freeze	12	66	97	.....	100	25	.....	54	55	234	.....	.....	.....	136	.....	413	88	a	.....	.....	1,163
TOTAL	111	89	366	149	108u	26u	206	737u	223u	1,322	357	10u	1,174u	484	872u	13,189	154u	4,258	949	124	24,908
U. S. Crop Utilization—1959 (Canned Includes Glass and Specialty Packs)																					
Can	102	25	280	142	.....	.....	141	52	.....	1,318	335g	.....	a	294	116	140w	90u	3,538g	370w	a	6,943
Dry	.....	y	.....	.....	.....	.....	.....	a	.....	.....	.....	14x	110	y	.....	1,400w	.....	.....	540	219	2,283
Freeze	16	58	89	.....	93	29	.....	56	56	261	.....	.....	.....	177	a	570w	110u	.....	.....	.....	1,515
TOTAL	118	83	369	142	113u	30u	141	681u	206u	1,579	335	14u	1,278u	471	935u	12,150u	151	3,538	910	219	23,463
U. S. Average Growers' Prices for Processing Except Drying (Except as Noted)—Per Ton																					
1951	$243	$146	$114	$21	$188	$197	$13	$72	$72	$23	$65	$170	$67	$90	$111	$54	$47	$31	$158	$83	.....
1952	210	148	121	22	171	213	20	61	73	24	65	321	92	91	123	65	46	29	173	105	.....
1953	203	153	125	20	156	200	13	64	62	23	65	320	27	94	91	27	30	27	163	124	.....
1954	226	150	120	21	156	154	12	66	70	21	59	200	43	93	80	43	40	24	161	100	.....
1955	246	143	111	21	158	175	18	64	72	20	54	221	47	89	67	36	39	25	140	106	.....
1956	226	150	120	20	156	173	12	53	75	21	55	209	55	92	80	40	40	26	137	91	.....
1957	187	142	117	19	147	142	15	66	66	20	54	165	57	90	84	39	38	25	143	72	.....
1958	194	141	111	18	154	167	11	57	74	19	53	206	54	88	78	26	41	26	134	100	.....
1959	198	133	107	18	154	182	15	60	67	19	51	189	48	88	a	a	38	24	a	a	.....

a—data not available. g—includes glass. r—entire crop is field-dried; bean figures include dried limas. s—includes processed open-market tonnage not reported by USDA. t—includes some tonnage from other areas. u—acreage, tonnage and price data include fresh market as well as processing crops. w—partially or wholly estimated. y—dried limas reported under Dry Beans, dried peas under Dry Peas. x—believed incomplete.

Statistics

U. S. Non-seasonal Canned Food Packs—Thousands of Cases

Year	BABY FOODS (24/2s) 4-5 Oz.	6-8 Oz.	TOTAL	SEAFOODS (VARIOUS SIZE CASES) Salmon	Sardines	Tuna	Other ex. soup/pet	TOTAL	MEATS (48-lb., Excluding SOUPS, SPAGHETTI PACKS) Lunch Meat	Hams	Corned Beef Hash	Chili Con Carne	Vienna Sausage	Stews	Other Meats	TOTAL
1941	3,650	250	3,900	7,832	8,172	2,932	2,831	21,767	2,500	300	1,400	800	2,500	300	6,600	14,400
1942	5,000	750	5,750	5,835	6,618	2,485	2,387	17,325	8,100	1,600	400	300	2,600	100	7,700	20,700
1943	6,080	1,260	7,340	5,704	5,860	2,696	2,096	16,356	12,300	4,700	800	600	2,500	———	19,500	40,400
1944	8,340	1,880	10,220	5,139	6,913	3,560	2,528	18,140	21,000	4,200	3,600	2,200	5,200	———	51,800	88,000
1945	11,460	2,490	13,950	4,908	6,491	4,532	2,064	17,995	10,900	2,000	2,300	1,700	1,400	1,200	19,500	39,000
1946	12,760	3,020	15,780	4,510	6,253	4,784	3,716	19,263	10,600	2,000	1,400	1,500	900	800	9,800	27,000
1947	9,320	2,560	11,880	5,641	4,667	5,804	2,576	18,778	6,000	2,100	2,200	1,400	1,700	800	6,100	20,300
1948	12,660	4,240	16,900	4,825	6,336	7,038	3,187	21,386	6,500	2,300	1,900	1,700	1,300	900	7,400	22,000
1949	11,770	4,660	16,430	5,525	6,843	7,290	3,147	22,805	6,600	2,900	1,400	1,800	1,200	600	6,500	21,000
1950	12,700	4,770	17,470	4,310	8,915	9,017	3,762	26,004	7,200	3,600	1,500	2,200	1,100	1,000	9,100	25,700
1951	11,620	4,450	16,070	4,646	4,542	8,237	3,650	21,075	7,100	3,800	1,600	2,200	1,100	1,600	10,100	27,700
1952	13,130	4,840	17,970	4,464	3,638	8,804	4,418	21,414	7,300	3,600	1,500	2,000	1,100	1,000	8,200	24,700
1953	14,710	6,460	21,170	3,900	3,800	9,770	3,265	20,735	6,500	4,100	1,400	2,300	1,100	1,500	10,600	27,500
1954	14,930	6,250	21,180	4,163	4,273	10,889	3,609	22,934	6,600	4,200	1,500	2,500	1,200	1,500	10,000	27,500
1955	14,910	6,370	21,280	3,289	2,683	9,938	3,717	19,627	7,100	5,000	1,600	3,100	1,300	2,000	12,800	32,900
1956	14,860	6,980	21,840	5,505	2,986	11,834	4,369	22,694	7,100	5,100	1,700	3,000	1,300	2,100	12,600	32,900
1957	a	a	27,000x	3,207	2,716	11,903	4,442	22,268	6,000	4,600	1,600	3,100	1,400	1,900	12,300	30,900
1958	a	a	30,200x	3,795	4,323	14,205	3,168	25,401	6,000	5,400	1,500	3,000	1,200	2,100	12,900	32,100
1959	a	a	31,000w	2,465	2,508	14,352	3,917	23,222	6,300	5,700	1,500	2,900	1,200	2,200	12,800	32,600

Year	MILK (48/14½ oz.) Con-densed	Evap-orated	TOTAL	NATIONALITY (VARIOUS) Chinese	Other	TOTAL	SPAGHETTI (VARIOUS) Spagh. & Meat	Spagh. Non-meat	Other Pasta	TOTAL	POULTRY 24/1-Lb.	Meat	SOUPS (LARGELY 30-lb.) Seafood	Tomato	Other	TOTAL
1941	2,700	74,630	77,330	a	a	a	a	a	a	a	60	9,510	690	13,200w	11,160w	34,500
1942	1,550	80,890	82,440	a	a	a	a	a	a	a	50	8,000	650	12,800w	6,220w	27,670
1943	2,720	70,280	73,000	a	a	a	a	a	a	a	40	7,280	360	7,550	7,800	22,990
1944	3,200	78,800	82,010	a	a	a	a	a	a	a	1,080	10,120	380	8,400	10,770	29,670
1945	3,300	86,810	90,110	a	a	a	a	a	a	a	1,950	11,330	560	9,850	10,810	32,550
1946	2,630	70,130	72,760	a	a	a	a	a	a	a	1,670	13,090	1,220	13,850	19,640	47,800
1947	3,790	73,750	77,540	a	a	a	d	6,285d	a	6,285m	1,200	13,970	1,180	10,100w	16,950	42,200
1948	2,910	78,190	81,100	a	a	a	590	5,000w	a	5,590m	2,100	15,060	1,020	11,400w	16,520w	44,000w
1949	2,320	63,850	66,170	a	a	a	640	5,000w	a	5,640m	1,800	13,620	910	11,200w	17,270w	43,000w
1950	1,400	66,800	68,200	a	a	a	1,070	5,500w	a	6,570m	2,200	17,230	1,110	11,900w	14,760w	45,000w
1951	1,350	66,590	67,940	a	a	a	1,290	6,000w	a	7,290m	2,400	14,800	1,150	d	28,050d	44 000w
1952	1,250	65,290	66,540	a	a	a	520	5,500w	a	6,320m	2,700	14,100	1 350	d	29,550d	45,000w
1953	950	58,700	59,650	a	a	a	1,120	6,000w	a	7,120m	2,500	19,630	1,390	d	28,980d	50,000w
1954	580	58,360	58,940	1,916	a	1,916m	1,202	6,862	a	8,064m	2,400	15,830	1,310	d	27,960d	45,100
1955	770	59,310	60,080	2,000w	a	2,000m	1,390	7,000w	a	8,390m	2,500	19,800	1,360	d	27,840d	49,000w
1956	1,600	58,390	59,990	2,100w	a	2,100m	1,520	7,500w	a	9,020m	2,700	19,270	1,470	d	28,260d	49,000w
1957	1,380	56,270	57,650	2,300w	a	2,300m	1,700w	7,700w	a	9,400m	3,200	18,080	1,500	d	32,470d	52,000w
1958	1,310	52,830	54,140	5,287	a	5,287m	6,224	8,013	a	14,237	3,600	17,210	1,420	d	36,370d	55,000w
1959	1,410	52,100	53,510	5,000w	a	5,000m	7,230	8,000w	a	15,230m	4,030	17,740	1,350	d	38,910d	58,000w

Year	NON-SEASONAL VEGETABLES (24/2s) Prep. Dry Beans	Misc. Beans	Hominy	Mush-rooms	Sweet Potatoes	White Potatoes	Sauer-kraut	Others	TOTAL	PET FOODS (48/1-lb.) Fish	Meat	TOTAL	SHORTNG. & LARD (Various)	COFFEE	ALL OTHER	TOTALS Exc. Seas. Frts. & Vegs.
1941	34,500	6,500w	2,800	900	1,990	700w	8,210	a	55,600	1,010	11,000	12,010	a	a	a	a
1942	10,500	1,500w	2,000w	400	920	600w	3,520	a	20,440	110	990	1,100	a	a	a	a
1943	15,110	1,349	1,400w	400	1,210	.....	3,720	a	23,189	.....	.....	.....	a	a	a	a
1944	25,630	539	1,000w	400	1,680	.....	3,240	a	32,489	.....	.....	.....	a	a	a	a
1945	28,750d	d	1,800w	400w	3,070	100w	8,490	a	42,430	.....	.....	.....	a	a	a	a
1946	38,380d	d	2,000w	500w	4,170	600	8,280	a	53,930	.....	.....	.....	a	a	a	a
1947	28,520	8,660	4,270	670	1,680	900	4,240	a	48,940	910	7,990	8,900	11,400	28,400	a	275,823
1948	33,700wd	d	4,000w	700w	1,820	1,600	6,510	a	48,330	1,320	14,680	16,000	14,800	34,800	a	290,106
1949	34,200wd	d	4,000w	750w	3,150	1,500	7,810	a	51,410	1,930	22,070	24,000	17,200	33,900w	a	303,355
1950	35,900wd	d	2,000w	800w	4,250	1,560	8,900	a	53,410	2,720	24,240	26,960	20,400	34,600w	a	326,514
1951	36,000wd	d	2,500w	1,000w	3,250	1,300	7,240	a	51,290	2,340	21,130	23,470	16,800	36,000w	a	337,505
1952	38,000wd	d	2,500w	1,000w	4,990	2,580	7,120	a	56,190	3,500	25,290	28,790	18,600	38,000w	a	332,494
1953	40,000wd	d	3,000w	1,100w	4,880	2,790	8,230	a	60,000	3,880	24,570	28,450	18,800	40,600	a	336,525
1954	32,676	12,159	2,354	1,257	4,060	1,660	8,060	a	62,226	4,030	26,390	30,420	24,000	35,800	a	340,480
1955	34,000w	12,000w	2,500w	1,300w	5,050	2,710	7,600	a	65,160	5,340	28,360	33,700	23,800	37,600	a	356,037
1956	34,000w	12,000w	3,000w	1,400w	5,060	2,900	8,140	a	66,500	6,690	32,310	39,000	22,000	39,600	a	367,344
1957	35,000w	15,000w	3,000w	1,300w	5,350	3,240	7,930	a	70,820	7,220	32,990	40,210	20,800	40,200	a	376,748
1958	36,123	17,799	2,799	925	7,020	3,380	7,640	a	75,686	7,550	32,620	40,170	22,000	41,800	a	399,621
1959	36,000w	19,000w	3,000w	1,200w	7,270	2,960	7,500w	a	76,930	7,210	35,550	41,760	27,400	44,200	a	408,882

a—not available. d—products combined as indicated. m—data incomplete; total of items shown only. w—partially or wholly estimated.
x—includes juice and estimated meat packs.

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PATTERSON, CALIFORNIA

The FINEST because . . .

√Located in Fertile San Joaquin Valley, with crops one to four miles from plant
√Specializing in private label packing of California vegetables, and the World's finest Baby Lima Beans
√One of the most modern plate freezing systems
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√Our own freezers and storage facilities — — enabling us to economically produce high quality products

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Specializing in Quality
Packs of Oregon Fruits
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Custom potatoes for your own canned or frozen product.

Simplot BRAND Idaho

J. R. SIMPLOT COMPANY
P. O. Box 51, Caldwell, Idaho

Statistics

U. S. Packs of Canned Fruits — Thousands of Cases

Year	BERRIES: Black	Blue	Black Rasp.	Red Rasp.	Boysen	Goose	Logan	Straw	Young	TOTAL	APPLES	APPLE SAUCE	APRICOTS	CHERRIES: Red Tart	Black Sweet	White Sweet	CRANBERRY SAUCE
Total U. S. Pack—Actual Cases																	
1939	394	251	179	256	d	51	199	153	136d	1,619	2,841	3,057	3,541	3,155	145	928	1,928
1940	440	322	175	215	d	70	75	180	143d	1,620	2,250	2,635	2,264	3,423	134	496	1,993
1941	811	587	217	188	55	59	62	121	40	2,140	4,348	4,182	4,352	2,064	242	792	2,593
1942	591	340	221	163	116	66	34	112	68	1,720	4,165	4,590	3,430	3,062	177	745	2,534
1943	310	438	94	115	120	28	50	8	45	1,208	1,878	2,226	1,256	562	232	680	1,672
1944	397	114	32	70	68	31	19	-----	24	755	3,356	4,302	3,030	3,072	218	714	1,546
1945	211	210	3	25	32	9	7	8	7	512	1,192	1,984	4,238	1,326	450	991	2,786
1946	409	425	79	52	35	18	43	6	22	1,089	3,301	8,840	10,802	3,086	714	1,168	6,312
1947	358	403	69	91	156	26	77	93	14	1,287	2,242	6,084	3,262	2,397	204	439	4,007
1948	528	626	162	170	714	37	107	78	31	2,453	1,728	4,840	5,011	3,552	329	625	2,397
1949	669	917	217	290	618	39	115	92	14	2,971	4,351	8,691	2,628	3,445	484	1,512	3,400
1950	353	760	158	160	286	30	34	130	10	1,939	5,024	13,034	4,090	5,923	167	824	4,684
1951	444	1,155	304	113	326	37	31	84	4	2,498	3,388v	9,381	5,191	4,672	272	947	5,120
1952	571	739	231	97	302	56	67	150	a	2,213	2,560	8,914	4,675	3,892	364	1,443	4,695
1953	501	758	178	89	270	63	43	175	11	2,088	2,942	11,205	5,828	3,849	481	1,659	5,422
1954	413	897	160	141	324d	60	12	132	d	2,139	4,709	15,294	3,412	3,086	468	1,014	5,515
1955	419	684	119	83	212	55	11	58	15	1,656	3,587	13,477	7,189	4,902	566	1,479	5,862
1956	447	467	157	45	224d	85	2	106	d	1,533	3,917	15,339	5,085	2,749	191	865	6,052
1957	490	730	215	79	335d	82	6	77	d	2,014	3,668	14,006	5,120	3,604	d	1,503d	5,752
1958	592	561	240	88	361d	22	4	78	d	1,946	3,639	16,003	2,344	2,746	d	1,508d	6,115
1959	525	566	196	72	289d	51	8	100	d	1,807	4,094	17,240	6,215	4,128	d	1,006d	6,988
U. S. Pack by Regions, 1958																	
N.Y.	-----	-----	e	7	-----	-----	-----	-----	-----	a	1,056	4,645	------	399e	-----	-----	------
Other E.	e	303	e	-----	-----	8	-----	-----	-----	a	2,019e	7,327e	------	e	d	ed	6,115e
East	e	303	e	7	-----	8	-----	-----	-----	352	3,075e	11,972	------	399	d	ed	6,115e
Mich.	e	-----	234	-----	-----	-----	-----	-----	-----	a	c	c	------	1,755	d	315d	------
Other MW	345e	258e	-----	-----	-----	-----	-----	16e	-----	a	63c	1,298c	------	341	d	16ed	e
Midw.	345e	258e	234	-----	-----	-----	-----	16e	-----	542	63c	1,298c	------	2,096	d	331ed	e
Fla.	e	-----	-----	-----	-----	-----	-----	-----	-----	a	------	------	------	------	-----	------	------
Other S.	e	e	e	-----	ed	-----	-----	e	-----	a	e	e	------	------	-----	------	------
South	e	e	e	-----	ed	-----	-----	e	-----	284	e	e	------	------	-----	------	------
Calif.	-----	-----	-----	-----	210ed	-----	-----	-----	d	a	124	2,528	2,174	------	d	236	------
N.W.	247	-----	-----	81	151d	14	4	62	d	a	377	205	82	111	d	941ed	e
Other W.	-----	-----	6e	-----	-----	-----	-----	-----	-----	a	c	c	88	140	d	ed	------
West	247	-----	6e	81	361ed	14	4	62	d	768	501	2,733	2,344	251	d	1,177d	e
TOTAL	592	561	240	88	361d	22	4	78	d	1,946	3,639	16,003	2,344	2,746	d	1,508d	6,115
U. S. Pack by Regions, 1959																	
N. Y.	----	-----	e	18	-----	-----	-----	-----	-----	a	847	4,737	------	408e	-----	-----	------
Other E.	e	372x	e	-----	-----	9	-----	-----	-----	a	2,525e	8,404e	------	e	d	ed	6,988e
East	e	372	e	18	-----	9	-----	-----	-----	399	3,372e	13,141	------	408	d	ed	6,988e
Mich.	e	164	193	-----	-----	-----	-----	-----	-----	a	c	c	------	3,134	d	137d	------
Other MW	328e	e	-----	-----	-----	-----	-----	21e	-----	a	161c	1,274c	------	432	d	10ed	e
Midw.	328	164	193	-----	-----	-----	-----	21e	-----	701	161c	1,274c	------	3,566	d	147ed	e
Fla.	-----	-----	-----	-----	-----	-----	-----	-----	-----	------	------	------	------	------	-----	------	------
Other S.	e	-----	e	-----	ed	-----	-----	e	-----	a	e	e	------	------	-----	------	------
South	e	-----	e	-----	ed	-----	-----	e	-----	------	e	e	------	------	-----	------	------
Calif.	-----	-----	-----	-----	163ed	-----	-----	-----	d	a	199	2,487	6,034	------	d	182d	------
N. W.	202	30e	-----	54	126d	42	8	79	d	a	302	338	105	89	d	663ed	e
Other W.	-----	-----	3e	-----	-----	-----	-----	-----	-----	a	e	e	76	65	d	14ed	------
West	202	30	3e	54	289ed	42	8	79	d	707	501	2,825	6,215	154	d	859d	e
TOTAL	525	566	196	72	289d	51	8	100	d	1,807	4,094	17,240	6,215	4,128	d	1,006d	6,988
U. S. Pack by Containers, 1958																	
8-Oz.	7	3	2	15	15d	----	----	20	d	62	----	596	220	----	d	151d	658
#1-T	f	-----	-----	-----	-----	----	----	-----	-----	------	----	------	f	----	d	df	------
#303g	353f	406	213	72	254d	18	3	44	d	1,363	----	12,033	774f	1,532	d	1,076fd	------
#2	1	2	-----	-----	-----	----	----	-----	-----	3	----	------	------	121	-----	------	------
#2½	-----	-----	-----	-----	-----	----	----	-----	-----	------	----	1,078	711	------	d	58d	------
#10	226	150	25	1	78d	4	----	12	d	496	3,639	2,206	632	1,034	d	209d	264
Other	5	-----	-----	-----	14d	----	1	3	d	22	----	------	7	59	d	14d	5,192
TOTAL	592	561	240	88	361d	22	4	78	d	1,946	3,639	16,003	2,344	2,746	d	1,508d	6,115
U. S. Pack by Containers, 1959																	
8-Oz.	11	5	----	15	12d	----	----	20	d	63	----	664	603	------	d	97d	640
#1-T	-----	-----	-----	-----	-----	----	----	-----	-----	------	----	------	f	------	d	fd	------
#303g	281	348	9	50	242d	42	7	61	d	1,200	----	12,221	1,831	2,290	d	640fd	------
#2	----	----	----	----	----	----	----	----	----	----	----	------	------	47	-----	------	------
#2½	-----	-----	-----	-----	-----	----	----	-----	-----	------	----	462	2,296	------	d	50	------
#10	166	212	27	5	23d	9	----	13	d	455	4,094	2,107	1,465	1,638	d	209cd	323
Other	67	1	----	2	12d	----	1	6	d	89	----	1,786	20	158	d	10cd	6,025
TOTAL	525	566	196	72	289d	51	8	100	d	1,807	4,094	17,240	6,215	4,128	d	1,006d	6,988
U. S. Pack in Standard Cases (24/2½)																	
1949	491	567	341b	b	447d	30	79	77	d	2,032	3,876	5,915	2,375	2,606	d	1,678d	1,795
1950	253	486	215b	b	209d	28	26	102	d	1,319	4,894	8,255	3,661	3,841	d	741d	2,483
1951	330	750	273b	b	223d	27	25	56	d	1,683	3,117	5,496	4,614	3,602	d	900d	2,671
1952	442	449	202b	b	200d	41	51	93	d	1,478	2,355	5,532	4,004	2,891	d	1,295d	2,464
1953	345	498	161b	b	179d	39	27	104	d	1,353	2,706	6,983	4,759	2,829	d	1,059d	2,812
1954	274	596	186b	b	210d	38	8	82	d	1,394	4,333	9,378	2,796	2,254	d	953d	2,961
1955	289	449	117b	b	128b	37	8	39	d	1,077	3,300	8,284	5,919	3,453	d	1,377d	3,009
1956	306	304	117b	b	143d	58	1	63	d	992	3,603	9,454	4,151	1,830	d	698d	3,120
1957	341	477	177b	b	210d	53	4	48	d	1,310	3,375	8,855	4,165	2,593	d	969d	2,976
1958	412	348	184b	b	234d	14	2	50	d	1,244	3,348	10,395	1,862	1,951	d	961d	3,149
1959	355	377	154b	b	177d	32	5	62	d	1,162	3,711	11,365	5,046	2,956	d	670	3,687

a—Not available. d—Products combined as indicated. e—Regions combined as indicated. w—Estimated. v—Includes pineapple packed in the Philippines. g—Includes No. 300. f—Sizes combined as indicated. p—Preliminary. b—Products combined as indicated. c—Regions combined as indicated.

U. S. Packs of Canned Fruits — Thousands of Cases (continued)

Year	CITRUS FRUIT: Orange Segs.	CITRUS FRUIT: Citrus Salad	CITRUS FRUIT: Grapefruit	MIXED FRUITS: Figs	MIXED FRUITS: Cocktail	MIXED FRUITS: Salad	MIXED FRUITS: Other Mixed	RIPE OLIVES	PEACHES: Clingstone	PEACHES: Spiced	PEACHES: Freestone	PEARS	PINEAPPLE	PLUMS: Purple	PLUMS: Other	TOTAL ALL FRUITS
Total U. S. Pack—Actual Cases																
1939	2	82	4,073	223	3,513	1,534	50	868	10,678	199	1,438	4,803	11,503	2,299	126	58,605
1940	21	317	3,153	425	4,180	608	9	1,135	9,763	159	1,701	5,788	9,494	1,161	110	52,839
1941	1	269	4,410	714	4,892	643	97	1,171	10,760	192	4,018	6,848	10,635	1,948	356	67,667
1942	.....	.....	897	751	5,484	588	.....	752	13,528	59	3,198	6,339	11,302	1,085	287	64,693
1943	.....	.....	985	981	5,653	.....	75	1,081	10,526	21	924	4,648	11,375	1,761	591	48,335
1944	.....	.....	485	943	6,302	.....	168	959	12,723	41	1,312	4,801	10,622	1,117	301	61,767
1945	.....	.....	2,722	690	6,112	.....	568	932	12,575d	d	2,100	4,625	9,648	1,647	88	55,186
1946	15	291	5,588	658	7,832	547	748	1,906	17,605	163	3,150	5,547	10,820	3,383	237	93,802
1947	114	1,163	3,426	831	9,082	554	240	959	15,325	268	3,847	5,931	12,312	1,851	153	75,978
1948	110	994	4,464	641	11,219	1,373	86	937	15,241	220	2,803	4,395	15,213	897	70	79,598
1949	9	418	3,414	345	6,995	1,164	458	1,390	17,758	485	2,661	6,479	15,073	1,750	167	86,048
1950	35	943	4,751	605	8,570	755	71	1,759	15,436	241	2,280	7,337	15,858	981	107	94,514
1951	40	655	3,819	848	10,743	1,116	126	2,226	20,711	309	3,825	7,895	15,229	2,473	133	101,617
1952	26	762	4,407	992	9,526	973	107	1,743	16,797	177	4,800	7,566	17,425	1,667	159	95,988
1953	21	990	5,070	681	10,760	1,167	141	1,290	19,752	513	4,461	7,210	18,196v	1,412	127	105,265
1954	23	891	6,081	741	11,907	999	193	2,043	15,626	677	5,314	9,768	17,977v	1,762	134	109,773
1955	39	763	5,483	923	13,178	1,159	253	1,869	20,778	637	5,181	10,574	19,948v	1,824	71	121,398
1956	18	655	5,001	925	15,460	1,298	296	2,591	24,761	465	7,603	11,117	19,815v	2,455	162	128,353
1957	13	531	4,650	727	14,884	1,172	279	1,901	21,935	497	6,201	10,772	18,557v	1,127	116	119,029
1958	d	646	5,072	800	15,107	839	289	2,214	20,151	471	8,244	9,777	19,483v	1,465	53	118,912
1959	.....	575dp	4,500p	457	16,944	1,202	438	1,610p	24,783	838	8,866	11,788	19,489v	1,904	74	134,886
U. S. Pack by Regions, 1958																
N.Y.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	e	.....	.....	.....	a
Other E.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	e	e	.....	e	.....	a
East	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	e	e	.....	e	.....	21,913
Mich.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	552	e	.....	e	e	a
Other MW	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	e	.....	360e	53e	a
Midw.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	552	685e	.....	360e	53e	5,980
Fla.	d	646d	5,056	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	a
Other S.	.....	16	.....	.....	.....	.....	.....	.....	.....	.....	998e	e	.....	.....	e	a
South	d	646d	5,072	.....	.....	.....	.....	.....	.....	.....	998e	e	.....	.....	e	7,000
Calif.	.....	.....	.....	800	15,107	839	289	2,214	20,151	364	5,190	4,736	.....	.....	.....	a
N.W.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,348	4,356	.....	1,103	e	a
Other W.	.....	.....	.....	.....	.....	.....	.....	.....	.....	107	156	.....	19,483	2	e	a
West	.....	.....	.....	800	15,107	839	289	2,214	20,151	471	6,694	9,092	19,483	1,105	e	84,019
TOTAL	d	646	5,072	800	15,107	839	289	2,214	20,151	471	8,244	9,777	19,483v	1,465	53	118,912
U. S. Pack by Regions, 1959																
N. Y.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	e	.....	.....	.....	a
Other E.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	229e	e	.....	e	.....	a
East	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	229e	e	.....	e	.....	24,537
Mich.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	355	e	.....	e	e	a
Other MW	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	e	.....	113e	74e	a
Midw.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	355	713	.....	113e	74e	7,104
Fla.	d	575dp	4,500pe	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	a
Other S.	.....	.....	e	.....	.....	.....	.....	.....	.....	.....	953	e	.....	.....	e	a
South	d	575dp	4,500pe	.....	.....	.....	.....	.....	.....	.....	953	e	.....	.....	e	6,028
Calif.	.....	.....	.....	457	16,944	1,202	438	1,610p	24,783	687	5,964	6,427	.....	.....	.....	a
N. W.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,365	4,648	.....	1,791	e	a
Other W.	.....	.....	.....	.....	.....	.....	.....	.....	.....	151	e	.....	19,489	e	e	a
West	.....	.....	.....	457	16,944	1,202	438	1,610p	24,783	838	7,329e	11,075	19,489	1,791	e	97,217
TOTAL	d	575dp	4,500pe	457	16,944	1,202	438	1,610p	24,783	838	8,866	11,788	19,489v	1,904	74	134,886
U. S. Pack by Containers, 1958																
8-Oz.	.....	56	236	61	1,655	123	1	.....	1,156	.....	257	788	829	67	1	6,917
#1-T	.....	.....	.....	.....	f	f	f	1,816	f	.....	f	.....	.....	f	.....	1,816
#303g	af	500	4,183	494	7,928f	387f	23f	.....	4,196f	35	1,897f	3,310	.....	280f	13	39,974
#2	.....	78	.....	.....	263	.....	.....	.....	.....	.....	.....	.....	6,623	.....	.....	7,088
#2½	.....	.....	.....	103	3,838	206	101	.....	11,521	352	5,433	4,114	2,809	558	9	30,891
#10	.....	.....	.....	142	1,423	125	164	398	3,232	84	627	1,533	3,778	557	30	20,661
Other	d	90	625	.....	.....	.....	.....	.....	46	.....	30	32	5,444	3	.....	11,565
TOTAL	d	646	5,072	800	15,107	839	289	2,214	20,151	471	8,244	9,777	19,483v	1,465	53	118,912
U. S. Pack by Containers, 1959																
8-Oz.	.....	.....	.....	56	1,787	177	.....	.....	1,342	.....	234	891	813	70	2	7,439
#1-T	.....	.....	.....	.....	f	f	.....	1,320w	f	f	f	f	.....	f	f	1,320
#303g	af	af	f	247	8,835f	601f	41	.....	5,431f	46f	2,082f	4,084f	.....	256f	7f	39,712
#2	.....	.....	f	.....	266	.....	.....	.....	.....	.....	.....	.....	6,619	.....	.....	6,932
#2½	.....	.....	.....	71	4,097	270	143	.....	13,623	649	5,706	4,708	2,739	842	10	35,666
#10	.....	.....	.....	83	1,959	154	249	290w	4,367	.....	866	2,112	4,105	719	55	25,185
Other	d	575dp	4,500pf	.....	.....	.....	5	.....	20	143	28	43	5,213	17	.....	16,632
TOTAL	d	575dp	4,500pf	457	16,944	1,202	438	1,610	24,783	838	8,866	11,788	19,489v	1,904	74	134,886
U. S. Pack in Standard Cases (24/2½)																
1949	a	292	2,360	279	6,269	931	436	1,391	16,525	478	2,609	5,904	11,712	1,672	155	71,290
1950	a	634	3,205	494	7,475	609	69	1,759	14,417	236	2,188	6,370	12,879	930	96	76,545
1951	a	396	2,356	705	9,003	855	124	2,226	19,145	335	3,658	6,647	12,183	2,237	121	82,074
1952	a	457	2,642	782	7,489	720	97	1,743	14,964	214	4,370	6,550	14,614	1,497	126	76,284
1953	a	589	2,999	480	8,228	868	122	1,279	17,163	506	3,937	5,808	13,408	1,288	111	79,287
1954	a	542	3,627	525	9,074	737	183	2,045	13,818	639	4,663	7,775	13,147	1,593	113	82,548
1955	a	467	3,296	637	9,809	831	234	1,869	17,923	594	4,615	8,345	14,719	1,639	69	91,456
1956	a	393	3,053	627	11,033	917	265	2,590	21,322	443	6,575	8,881	14,554	2,193	137	96,831
1957	a	327	2,886	506	10,638	864	245	1,901	18,484	478	5,393	8,568	13,495	978	99	89,095
1958	a	394	3,167	549	10,734	611	265	2,300	17,545	449	7,261	7,883	14,165	1,271	44	89,548
1959	a	361	2,760p	321	12,074	857	398	1,610	21,490	802	7,810	9,499	14,167	1,701	66	102,516

U. S. Packs of Canned Seasonal Vegetables

Year	ARTICHOKES	ASPARAGUS White	ASPARAGUS Green	FRESH BEANS Green	FRESH BEANS Wax	FRESH BEANS Lima	BEETS	CARROTS	CORN Cob	CORN Cut	CORN Alasw	OKRA With tomato	OKRA FRESH Green	PEAS Blackeye etc.	PIMENTOS	PUMPKIN AND SQUASH
Total U. S. Pack (Thousands of Actual Cases)																
1941	31	1,101	2,003	10,862	1,632	2,304	6,429	1,555	764	27,048	300dw	d	29,018	a	500	2,494
1942	22	1,412	2,583	19,625	2,057	2,452	6,740	2,168	173	33,147	232	67	34,853	a	646	1,529
1943	18	1,096	2,482	18,717	2,150	1,804	6,604	2,813	----	29,796	196	50	33,827	a	338	1,452
1944	44	1,310	2,523	14,818	1,479	1,570	8,037	3,155	----	25,982	191	49	30,131	a	450	2,127
1945	29	1,197	2,724	14,580	1,286	1,551	9,591	4,312	----	29,539	235	49	38,145	a	562	1,325
1946	----	1,156	2,287	15,281	1,821	1,718	7,248	3,418	----	32,526	301	109	39,929	a	788	3,235
1947	42	1,165	2,771	10,053	2,089	2,154	3,495	860	50w	27,572	469	228	33,996	a	779	2,465
1948	43	1,003	2,695	11,747	2,260	2,599	4,602	2,793	50w	34,410	391	205	24,446	a	779	1,450
1949	40w	1,430	3,000	16,883	2,420	4,713	7,923	1,664	100w	33,138	187	223	24,945	1,234	1,150	843
1950	50w	1,497	3,154	18,236	1,078	3,591	8,483	1,705	200w	21,645	303	251	32,726	1,823	2,294	1,778
1951	50w	1,099	3,870	17,321	2,546	3,278	7,834	2,030	100w	30,189	473	431	37,837	1,495	672	3,481
1952	50w	1,278	3,318	14,392	2,817	2,569	7,217	2,600	100w	38,212	421	344	29,446	1,758	653	4,449
1953	a	1,345	3,144	20,549	3,348	3,377	9,137	2,629	100	36,245	482	622	31,365	2,359	2,133	2,547
1954	a	1,256	4,256	25,231	3,543	3,952	7,738	2,010	183	36,761	401	185	27,245	1,474	1,488	1,786
1955	a	2,167	4,902	22,204	2,730	3,179	8,195	1,792	200w	29,208	251	218	31,222	2,171	2,300	3,568
1956	a	1,993	4,252	22,392	3,357	3,371	10,440	2,968	200w	42,245	242	137	33,094	1,090	896	4,217
1957	a	1,983	4,786	24,038	4,229	2,739	9,059	2,295	200w	37,517	351	300	37,807	1,630	919	2,844
1958	a	2,827	4,659	25,359	2,837	2,752	8,652	3,034	200w	32,078	545	442	33,110	2,275	1,261	2,997
1959	a	1,926	5,148	23,731	3,154	3,008	8,673	2,729	200w	40,160	441	281	29,020	1,987	2,205	3,128
U. S. Pack by Regions, 1958 (Thousands of Actual Cases)																
N.Y.	----	----	----	2,970	1,121	e	2,408	383	a	1,281	----	----	e	----	e	e
Penna.	----	----	----	835	189	e	t	t	a	497	----	----	271	----	e	----
Other E.	----	----	706	358d	d	e	t	t	a	699	----	----	1,372e	----	1,261e	437e
East	----	----	706	5,473d	d	e	2,408	383	a	2,477	----	----	1,643	----	1,261e	437e
Ind.	----	----	----	----	----	----	----	----	a	932	----	----	244	----	----	104
Mich.	----	----	748	780	283	----	387	80e	a	----	----	----	n	----	----	----
Ohio	----	----	----	----	----	----	----	e	a	541	----	----	n	----	----	163
Wisc.	----	----	----	2,424	803	424	3,544	903	a	6,697	----	----	4,587	----	----	----
Other MW	----	----	838	289d	d	653	t	t	200w	14,044	----	----	17,980n	----	----	1,668
Midwest	----	----	1,586	4,579d	d	1,077	3,931	992	200w	22,214	----	----	22,811	----	----	1,935
Md.-Del.	----	----	341	2,471	23	798	t	t	a	e	----	----	m	----	----	e
Fla.	----	----	----	496	----	----	----	----	a	----	----	----	----	----	----	----
Ozarks	----	----	----	2,026	----	----	----	----	a	----	----	----	----	----	----	----
Texas	----	----	----	1,162	----	----	----	----	a	----	----	----	----	----	----	----
Other S.	----	----	----	1,830d	d	401e	1,378t	952t	a	2,540e	545	442	1,083m	2,275	----	e
South	----	----	341	7,998d	d	1,199e	1,378t	952t	a	2,540	545	442	1,083	2,275	----	e
Calif.	a	2,827	1,388	1,878	----	----	----	103	a	----	----	----	----	----	e	----
N.W.	a	----	638	7,073	54	----	935	604	a	3,776	----	----	5,776	----	----	m
Intrmtn.	a	----	----	1,141d	d	476	t	t	a	1,071	----	----	1,797	----	----	625m
West	a	2,827	2,026	10,146d	d	476	935	707	a	4,847	----	----	7,573	----	e	625
TOTAL	a	2,827	4,659	28,196d	d	2,752	8,652	3,034	200w	32,078	545	442	33,110	2,275	1,261	2,997
U. S. Pack by Regions, 1959 (Thousands of Actual Cases)																
N. Y.	----	----	----	2,733	1,212	e	2,814	300	a	1,338	----	----	882	----	----	e
Penna.	----	----	----	702	214	e	e	e	a	568	----	----	e	----	----	e
Other E.	----	----	674	207	240	61e	82e	238e	a	1,115e	----	----	1,480e	----	e	478e
East	----	----	674	3,642	1,666	61e	2,897	533	a	3,021	----	----	2,362	----	e	478e
Ind.	----	----	----	----	----	----	----	----	a	1,060	----	----	n	----	----	169
Mich.	----	----	892	875	297	----	229	m	a	----	----	----	n	----	----	m
Ohio	----	----	----	----	----	----	----	m	a	711	----	----	n	----	----	143
Wisc.	----	----	----	2,684	939	495	2,570	478	a	9,794	----	----	9,781	----	----	m
Other MW	----	----	731	214	30	1,367	1,679	996m	200w	18,199e	----	----	8,437n	----	----	1,683m
Midwest	----	----	1,623	3,773	1,266	1,862	4,478	1,474	200w	29,764	----	----	18,218	----	----	1,995m
Md.-Del.	----	----	406	1,983	51	728	e	e	a	1,918	----	----	e	----	----	e
Fla.	----	----	----	509	----	----	----	----	a	----	----	----	----	----	----	----
Ozarks	----	----	----	1,497d	d	----	----	----	a	----	----	----	----	----	----	----
Texas	----	----	----	1,164	----	----	----	----	a	----	----	----	----	----	----	----
Other S.	----	----	----	1,433	----	e	e	e	a	e	441	281	e	1,987	2,205e	e
South	----	----	406	6,586	51	728	e	e	a	1,918e	441	281	e	1,987	2,205e	e
Calif.	a	1,926	1,774	1,733	----	----	----	120	a	----	----	----	----	----	e	n
N. W.	a	----	671	6,969	51	----	1,045	579	a	4,606	----	----	5,722	----	----	n
Intrmtn.	a	----	----	1,028	120	357	253	23	a	851	----	----	2,718	----	----	655m
West	a	1,926	2,445	9,730	171	357	1,298	722	a	5,457	----	----	8,440	----	e	655n
TOTAL	a	1,926	5,148	23,731	3,154	3,008	8,673	2,729	200w	40,160	441	281	29,020	1,987	2,205	3,128
U. S. Pack by Containers, 1958 (Thousands of Actual Cases)																
8-Oz.	a	153	257	1,871	371	401	791	298	a	3,047	----	----	4,540	----	645g	----
#1-P	a	354	294	f	f	----	----	----	a	104	----	----	178	5	----	----
#303-300	a	1,365	2,676	17,261	1,997	1,956	6,347	1,414	a	20,097	457	428	23,862	1,854	----	1,082
#2	a	874	56	f	----	----	----	----	a	----	----	----	----	53	----	----
#10	a	11	326	5,313	434	389	1,487	1,314	a	2,607	74	9	4,413	341	18	661
Other	a	70	1,050	914	35	6	27	8	200w	6,223	14	5	117	22	598	1,254
TOTAL	a	2,827	4,659	25,359	2,837	2,752	8,652	3,034	200w	32,078	545	442	33,110	2,275	1,261	2,997
U. S. Pack by Containers, 1959 (Thousands of Actual Cases)																
8-Oz.	a	84	277	1,642	304	382	773	236	a	3,468	f	f	3,935	----	1,126g	----
#1-P	a	357	303	----	----	----	----	----	a	f	----	----	180	8	----	----
#303-300	a	892	3,070	16,022	2,894	2,250	6,340	1,250	a	24,735	369	274	21,374	1,581	----	1,136
#2	a	516	59	----	----	----	----	----	a	----	----	----	----	41	----	----
#2 ½	a	----	----	608	----	----	----	----	a	----	----	----	----	----	101	1,225
#10	a	15	332	5,207	424	426	1,540	1,238	a	3,328	63	6	8,413	339	22	644
Other	a	62	1,107	257	32	----	20	5	200w	8,629f	9f	1f	118	18	956	123
TOTAL	a	1,926	5,148	23,731	3,154	3,008	8,673	2,729	200w	40,160	441	281	29,020	1,987	2,205	3,128
U. S. Pack in Standard Cases (Thousands of Cases, 24/2 equivalent)																
1951	a	d	4,795d	17,047	2,393	2,950	7,532	2,177	a	25,576	455	383	33,916	1,358	447	4,395
1952	a	d	4,354d	13,810	2,536	2,316	6,693	2,775	a	32,329	388	297	26,509	1,541	309	5,408
1953	a	d	4,018d	19,592	3,019	3,085	8,583	2,747	a	30,982	437	530	28,037	2,008	1,022	2,983
1954	a	d	4,978d	23,883	3,186	3,520	7,061	2,096	a	30,619	357	154	23,951	1,293	693	2,134
1955	a	d	6,248d	20,919	2,452	2,806	7,539	1,833	a	24,075	238	181	27,376	1,836	1,008	4,204
1956	a	d	5,422d	20,982	3,000	3,395	9,691	3,075	a	35,668	212	115	29,248	875	349	5,097
1957	a	d	5,887d	22,379	3,795	2,518	8,359	2,388	a	31,533	311	249	33,857	1,418	357	3,327
1958	a	d	6,183d	23,876	2,556	2,464	7,871	3,164	a	27,075	485	368	29,549	1,951	493	3,535
1959	a	d	5,811d	22,528	2,810	2,692	7,914	2,873	a	33,810	394	238	25,674	1,727	638	3,666

a—Not available. w—Partially estimated. d—Products combined as indicated. e—Regions combined as indicated. t—Includes Other East, Other Midwest, and other West. f—Sizes combined as indicated. g—Includes other cans of nearby sizes. h—Includes glass. m—Regions combined as indicated. n—Regions combined as indicated.

U. S. Packs of Canned Seasonal Vegetables (continued)

Year	SPINACH	OTHER GREENS	TOMATOES	TOMATO PRODUCTS (TIN) Catsup	Chili Sauce	Paste	Puree	Sauce	Misc. (Calif. only)	MIXED VEGETABLES Peas and Carrots	Succotash	Triple Succotash	Salad and Other	RHUBARB	MISC. VEGS.	TOTAL VEGS.
1941	4,150	600w	26,664	1,948	150w	2,500w	2,755	2,400w	112	700w	400w	.....	1,800w	40w	a	130,560
1942	7,694	797	35,454	2,649	150w	2,900w	3,824	2,250w	96	500w	200w	.....	1,000w	20w	a	165,240
1943	5,759	834	25,027	2,553	150w	3,400w	5,239	2,450w	94	400w	100w	.....	700w	.....	a	148,091
1944	8,072	1,234	22,577	2,891	150w	4,900w	7,097	3,325w	131	400w	100w	.....	700w	.....	a	143,443
1945	7,272	2,620	14,471	1,456	100w	3,500w	7,245	5,600w	88	700w	200w	.....	1,870w	.....	a	150,197
1946	7,200	1,221	20,995	1,761	100w	4,645	9,356	8,735	57	1,200w	120w	.....	2,900w	.....	a	168,107
1947	3,372	810	23,087	2,099	228	6,088	4,501	4,492	144	900w	192w	.....	2,800w	a	a	137,801
1948	4,348	1,532	21,467	1,841	103	3,600w	2,877	5,000w	119	1,000w	250w	.....	2,650w	a	a	134,386
1949	5,884	2,247	18,874	1,375	166	4,000w	3,092	5,000w	170	1,100w	400w	.....	2,500w	a	a	143,527
1950	4,852	1,779	18,724	1,766	198	3,200w	3,094	5,800w	265	1,271	214	195	2,653	a	1,564	145,289
1951	6,742	2,606	27,672	4,120	323	8,800w	5,881	8,200w	1,069	1,569	259	a	2,172	a	1,699	183,818
1952	5,419	2,650	25,176	2,374	197	6,900w	3,633	7,800w	267	1,485	318	a	2,282	a	1,560	169,685
1953	5,159	2,203	20,841	2,222	405	5,300w	2,829	4,800w	274	1,738	488	a	1,991	a	1,690	169,147
1954	3,871	2,105	20,964	2,212	183	4,434	2,499	7,059	344	1,226	307	a	1,914	a	2,289	166,933
1955	5,829	2,509	23,679	3,669	318	6,794	3,307	8,640	496	1,408	217	a	1,870	a	2,074	175,117
1956	6,282	2,249	28,678	4,979	716	9,557	4,768	10,378	744	1,591	385	a	1,874	a	2,776	206,231
1957	6,230	2,153	20,895	2,873	636	6,570	3,456	6,863	922	1,861	523	a	1,598	35	a	185,312
1958	5,211	2,523	29,604	3,477	594	8,242	3,307	10,979	898	1,518	384	a	2,320	49	a	192,224
1959	7,112	1,773	23,000	3,073	570	6,160	2,781	8,686	1,404	1,746	386	a	1,973	58	a	184,513
U. S. Pack by Regions, 1958																
N.Y.	.....	.....	384	180	.....	.....	e	e	.....	e	.....	a	.....	.....	a	8,727
Penns.	.....	.....	405	.....	.....	.....	e	e	.....	e	.....	a	.....	.....	a	2,197
Other E.	m	.....	255	439e	321e	.....	481e	567e	.....	96e	e	a	e	e	a	6,992
East	m	.....	1,044	619	321e	.....	481e	567e	.....	96e	e	a	e	e	a	17,916
Ind.	.....	.....	1,905	.....	.....	.....	345	.....	.....	m	.....	a	.....	.....	a	3,530
Mich.	.....	.....	.....	.....	.....	.....	93	.....	.....	m	.....	a	.....	.....	a	2,380
Ohio	.....	.....	1,066	.....	.....	.....	80	.....	.....	m	.....	a	.....	.....	a	1,850
Wisc.	.....	.....	.....	.....	.....	.....	.....	.....	.....	m	.....	a	.....	.....	a	19,382
Other MW	e	.....	518	e	e	.....	46	m	.....	871m	384e	a	2,320e	.....	a	39,811
Midwest	e	.....	3,489	e	e	.....	564	m	.....	871	384e	a	2,320e	.....	a	66,953
Md.-Del.	239	.....	5,880	.....	.....	.....	e	e	.....	e	.....	a	.....	.....	a	9,752
Fla.	.....	.....	1,074	.....	.....	.....	.....	.....	.....	.....	.....	a	.....	.....	a	1,570
Ozarks	1,726	1,354	714	.....	.....	.....	.....	.....	.....	.....	.....	a	.....	.....	a	5,820
Texas	.....	.....	2,304	.....	.....	.....	.....	.....	.....	.....	.....	a	.....	.....	a	3,466
Other S.	1,139m	1,169e	1,270	e	e	.....	e	e	.....	e	.....	a	.....	.....	a	15,014
South	3,104m	2,523	11,242	e	e	.....	e	e	.....	e	.....	a	.....	.....	a	35,622
Calif.	1,985	.....	13,508	2,858	273	8,242	2,305	10,373	898	n	.....	a	.....	.....	a	46,638
N.W.	e	.....	e	.....	.....	.....	.....	m	.....	488	.....	a	.....	49e	a	19,393
Intrmtn.	122e	e	321	a	a	.....	47	39m	.....	63n	e	a	e	.....	a	5,702
West	2,107e	e	13,829	2,858	273	8,242	2,352	10,412m	898	551	e	a	e	49e	a	71,733
TOTAL	5,211	2,523	29,604	3,477	594	8,242	3,307	10,979	898	1,518	384	a	2,320	49	a	192,224
U. S. Pack by Regions, 1959																
N. Y.	.....	m	290	196	e	.....	e	e	.....	e	.....	a	.....	.....	a	9,765
Penns.	.....	.....	245	.....	.....	.....	e	e	.....	e	.....	a	.....	.....	a	1,729
Other E.	.....	.....	187	584e	314e	.....	330e	552e	.....	130e	e	a	e	e	a	6,668
East	m	.....	722	780	314e	.....	330e	552e	.....	130e	e	a	e	e	a	18,162
Ind.	.....	.....	1,650	.....	.....	.....	253	.....	.....	m	.....	a	.....	.....	a	3,132
Mich.	.....	.....	.....	.....	.....	.....	71	.....	.....	m	.....	a	.....	.....	a	2,364
Ohio	.....	.....	1,118	.....	.....	.....	90	.....	.....	m	.....	a	.....	.....	a	2,062
Wisc.	.....	.....	.....	.....	.....	.....	.....	.....	.....	m	.....	a	.....	.....	a	26,741
Other MW	m	.....	421	e	e	.....	m	e	.....	901m	386e	a	1,973e	.....	a	37,217
Midwest	m	.....	3,189	e	e	.....	414	e	.....	901m	386e	a	1,973e	.....	a	71,516
Md.-Del.	m	.....	3,794	.....	.....	.....	e	e	.....	e	.....	a	.....	.....	a	8,880
Fla.	m	.....	1,330	.....	.....	.....	.....	.....	.....	.....	.....	a	.....	.....	a	1,839
Ozarks	1,787	918	563	.....	.....	.....	.....	.....	.....	m	.....	a	.....	.....	a	4,765
Texas	m	78	1,649	.....	.....	.....	.....	.....	.....	.....	.....	a	.....	.....	a	2,891
Other S.	2,161	777e	996	e	e	.....	161m	e	.....	e	.....	a	.....	.....	a	10,442
South	3,948	1,773	8,332	e	e	.....	161m	e	.....	e	.....	a	.....	.....	a	28,817
Calif.	3,164	e	10,173	2,293	256	6,160	1,833	8,134	1,404	n	.....	a	.....	.....	a	38,970
N. W.	.....	m	e	.....	.....	.....	.....	e	.....	561	.....	a	.....	58e	a	20,262
Intrmtn.	.....	m	584e	a	a	.....	43	e	.....	154n	e	a	e	.....	a	6,786
West	3,164	e	10,757	2,293	256	6,160	1,876	8,134	1,404	715	e	a	e	58e	a	66,018
TOTAL	7,112	1,773	23,000	3,073	570	6,160	2,781	8,686	1,404	1,746	386	a	1,973e	58e	a	184,513
U. S. Pack by Containers, 1958 (Thousands of Actual Cases)																
8-Oz.	361	.....	329	.....	.....	.....	43	9,286	.....	475	65	a	241	.....	a	23,174
#1-P	198	.....	801	.....	.....	.....	359	.....	.....	35	.....	a	.....	.....	a	2,328
#303	3,042	1,686	17,607	.....	.....	.....	195g	.....	.....	968	310	a	1,757	20	a	106,381
#2	41	.....	395	.....	.....	.....	45	.....	.....	.....	.....	a	.....	.....	a	1,464
#10	697	614	5,600	3,426	311	3,395	1,937	223	580	40	9	a	322	26	a	34,577
Other	872	223	4,872	51	283	4,847	818	1,470	318	.....	.....	a	.....	3	a	24,300
TOTAL	5,211	2,523	29,604	3,477	594	8,242	3,397	10,979	898	1,518	384	a	2,320	49	a	192,224
U. S. Pack by Containers, 1959 (Thousands of Actual Cases)																
8-Oz.	323	.....	.....	.....	.....	.....	23	7,059	.....	531	93	a	260	.....	a	20,466
#1-P	214	.....	567	.....	.....	.....	287	.....	.....	37	.....	a	.....	.....	a	1,953
#303-300	4,353	1,157	12,778	.....	.....	.....	119g	.....	.....	1,150	276	a	1,426	28	a	102,974
#2	.....	.....	409	.....	.....	.....	58	.....	.....	.....	.....	a	.....	.....	a	1,074
#2½	1,108	191	3,808	.....	.....	145	546	.....	.....	.....	.....	a	.....	.....	a	7,727
#10	1,067	425	5,200	2,962	296	1,673	1,513	76	878	28	17	a	287	30	a	18,870
Other	47	.....	247	111	274	4,342	235	1,551	526	.....	.....	a	.....	.....	a	31,449
TOTAL	7,112	1,773	23,000	3,073	570	6,160	2,781	8,686	1,404	1,746	386	a	1,973	58	a	184,513
U. S. Pack in Standard Cases (Thousands of Cases, 24/2 equivalent)																
1951	7,648	2,807	31,770	18,534h	1,245h	10,000w	7,737	a	1,095	1,332	216	a	1,923	a	a	187,788
1952	6,114	2,868	27,981	14,467h	1,006h	8,500w	4,684	a	317	1,246	265	a	2,025	a	a	168,734
1953	5,407	2,255	22,334	14,099h	1,087h	6,700w	3,643	a	306	1,466	405	a	1,759	a	a	166,501
1954	3,979	2,090	21,827	13,604h	756h	6,200w	3,159	8,204	401	1,038	258	a	1,743	a	a	167,184
1955	6,005	2,501	24,727	17,378h	1,004h	9,000w	4,287	10,061	592	1,179	180	a	1,660	a	a	179,289
1956	6,409	2,224	29,883	23,118h	1,560h	12,260	6,158	12,065	875	1,342	325	a	1,674	a	a	215,022
1957	6,346	2,103	21,686	17,296h	884h	8,341	4,527	7,969	1,078	1,578	447	a	1,429	a	a	190,062
1958	5,240	2,318	30,465	20,170h	905h	10,851	4,320	12,158	1,089	1,273	322	a	1,868	a	a	200,549
1959	7,135	1,791	24,126	18,162h	1,096h	7,920	3,525	9,448	1,699	1,465	328	a	1,767	a	a	189,232

(See preceding page for footnotes)

Statistics

U. S. Canned Food Marketing Statistics — Millions of Standard Cases

CANNED FRUITS (24/2½)

Year	Carry In	Pack	Total Supply*	Exports	Total Shipt.
1931–32	11.0	35.0	46.0	5.6	33.7
1932–33	12.5	25.9	38.6	5.3	33.6
1933–34	5.0	37.7	42.9	6.6	37.4
1934–35	5.5	39.5	45.3	5.3	39.1
1935–36	6.2	44.2	50.6	7.7	43.7
1936–37	6.9	47.6	55.1	6.0	50.2
1937–38	4.9	54.5	60.3	6.0	43.2
1938–39	17.1	39.8	58.0	8.1	49.4
1939–40	8.6	53.1	63.2	7.2	53.9
1940–41	9.3	48.6	59.9	0.4	54.4
1941–42	5.5	61.3	67.6	1.9	62.2
1942–43	5.4	58.9	64.9	0.7	61.7
1943–44	3.2	44.8	48.8	2.4	47.2
1944–45	1.6	56.4	58.5	2.5	5..0
1945–46	1.5	49.6	51.6	2.3	50.0
1946–47	1.6	82.7	85.3	4.4	80.5
1947–48	4.8	66.5	73.0	2.1	64.6
1948–49	8.4	65.6	75.9	1.5	64.4
1949–50	11.5	71.1	85.0	1.7	73.4
1950–51	11.6	76.0	89.8	2.2	80.9
1951–52	8.9	82.0	92.8	2.2	76.6
1952–53	16.2	76.3	95.0	3.0	81.8
1953–54	14.5	79.3	96.1	3.5	81.5
1954–55	14.6	82.5	99.0	4.2	85.3
1955–56	14.0	91.6	107.9	5.9	91.0
1956–57	16.9	96.8	115.1	7.9	90.6
1957–58	24.5	89.1	114.8	8.0	96.4
1958–59	18.4	89.6	108.9	6.1	90.4
1959–60	18.5	102.5	122.0	7.0	102.6
1957–58					
Apples	0.9	3.4	4.3	0.1	3.4
Applesauce	2.1	8.9	11.0	.....	9.4
Apricots	1.0	4.2	5.2	0.3	4.6
Berries	0.1w	1.3	1.5	.....	1.4
Cranberry	0.5w	3.0	3.5	.....	3.0
Cherry, red	0.1	2.6	2.7	.....	2.6
Cherry, swt.	0.1	1.0	1.2	0.1	1.0
Cocktail	2.2	10.6	12.8	1.6h	10.6
Salad	0.3	0.9	1.2	h	0.9
Grapefruit	0.5	2.9	3.4	0.3	3.0
Other citrus	0.3	0.3	0.6	.....	0.5
Olives	0.6	1.9	2.5	.....	2.0
Peaches, clg.	4.6	18.5	23.1	2.6n	20.6
Peaches, free	1.7	5.4	7.1	n	5.9
Pears	2.6	8.6	11.2	0.3	8.7
Pineapple	5.0	13.5	19.1	2.2	15.0
Purp. Plums	1.5	1.0	2.5	d	2.3
All Other	0.4w	1.1	1.9	0.5d	1.5
TOTAL	24.5	89.1	114.8	8.0	96.4
1958–59					
Apples	0.9	3.3	4.3	a	3.5
Applesauce	1.6	10.4	12.0	a	10.4
Apricots	0.6	1.9	2.5	a	2.4
Berries	0.1w	1.2	1.3	a	1.2
Cranberry	0.5w	3.1	3.6	a	3.1
Cherry, red	0.1	2.0	2.1	a	1.9
Cherry, swt.	0.2	1.0	1.1	a	0.8
Cocktail	2.2	10.7	12.9	1.5	10.6
Salad	0.3	0.6	0.9	a	0.7
Grapefruit	0.4	3.2	3.6	a	3.0
Other citrus	0.1	0.4	0.5	a	0.3
Olives	0.5	2.3	2.8	a	2.3
Peaches, clg.	2.5	17.5	20.0	2.2	17.0
Peaches, free	1.2	7.3	8.5	a	7.1
Pears	2.5	7.9	10.4	0.2	8.3
Pineapple	4.1	14.2	18.8	2.2	14.9
Purp. Plums	0.2	1.3	1.5	a	1.2
All Other	0.4w	1.3	2.1	a	1.7
TOTAL	18.4	89.6	108.9	6.1	90.4
1959–60					
Apples	0.8	3.7	4.5	.....	3.5p
Applesauce	1.6	11.4	13.0	.....	11.3p
Apricots	0.1	5.0	5.2	.....	4.6
Berries	0.1	1.2	1.3	.....	1.2
Cranberry	0.5w	3.7	4.2	.....	3.2
Cherry, red	0.2	2.9	3.1	.....	2.7p
Cherry, swt.	0.3	0.7	1.0	.....	0.9
Figs	0.2	0.3	0.5	.....	0.4
Cocktail	2.3	12.1	14.4	1.7p	12.2
Salad	0.2	0.8	1.1	.....	0.8
Grapefruit	0.6p	2.8p	3.4	.....	3.0
Other citrus	0.2p	0.4	0.6	.....	0.4
Olives	0.5p	1.6	2.1	.....	2.1
Peaches, clg.	3.0	21.5	24.5	3.5p	21.9
Peaches, free	1.4	7.8	9.2	.....	7.1
Pears	2.1	9.5	11.6	3.0p	9.3
Pineapple	3.9	14.1	18.9	1.5p	15.2
Purp. Plums	0.3	1.7	2.0	.....	1.7
All Other	0.2	1.3	1.4	.....	1.1
TOTAL	18.5	102.5	122.0	7.0	102.6

CANNED SEASONAL VEGETABLES (24/2)

Year	Carry In	Pack	Total Supply*	Exports	Total Shipt.
1931–32	21.4	68.9	93.4	0.6	74.4
1932–33	19.0	55.7	77.2	0.4	69.5
1933–34	7.7	66.9	77.0	0.7	72.7
1934–35	4.3	76.9	85.6	0.7	81.2
1935–36	4.4	103.6	110.5	0.7	97.7
1936–37	9.0	90.7	102.1	0.7	90.6
1937–38	11.5	115.3	129.0	0.6	104.0
1938–39	25.0	104.9	132.6	0.7	103.4
1939–40	29.2	93.2	124.0	1.0	108.6
1940–41	15.4	113.5	129.0	1.5	119.7
1941–42	9.3	141.3	151.0	5.8	145.9
1942–43	5.1	178.8	184.0	2.3	180.8
1943–44	3.2	159.8	163.0	8.1	158.6
1944–45	4.4	157.7	162.5	7.6	161.1
1945–46	1.4	162.2	164.0	3.8	160.0
1946–47	4.0	181.8	186.5	3.6	171.5
1947–48	15.0	145.5	161.6	5.3	140.1
1948–49	21.5	137.7	160.6	2.1	139.6
1949–50	21.0	145.7	168.4	1.8	148.9
1950–51	19.5	142.6	166.2	1.8	158.2
1951–52	8.0	185.1	196.3	3.1	172.2
1952–53	23.9	166.0	192.2	2.7	163.3
1953–54	28.9	161.4	192.6	2.9	163.9
1954–55	28.7	156.5	188.3	4.3	165.8
1955–56	22.5	166.5	192.6	3.7	170.9
1956–57	21.7	197.9	223.1	5.8	182.8
1957–58	40.3	176.6	220.2	5.1	183.2
1958–59	37.3	185.2	226.6	3.5	181.6
1959–60	45.0	173.4	222.9	2.0	191.6
1957–58					
Asparagus	1.7	5.9	7.6	1.6	6.0
Beans, lima	1.1	2.5	3.6	.....	3.0
Beans, snap	4.3	26.2	30.5	0.1	25.6
Beets	2.7	8.4	11.1	.....	8.7
Carrots	1.1	2.4	3.5	.....	2.2
Corn	4.8	31.5	36.3	0.3	31.8
Peas	3.3	33.7	37.0	0.3	29.5
Pumpkin	1.6	3.3	4.9	.....	4.2
Spinach	1.6	6.4	8.0	0.1	6.3
Tomatoes	5.7	21.7	30.4	0.2	27.7
Tomato Products					
Paste	2.4c	8.3	10.9	0.9	9.3
Puree	0.2c	4.5	4.7	.....	3.6
Catsup†	1.9	3.7	5.6	0.4	4.2
Chili sauce†	0.2	0.7	0.9	.....	0.7
Sauce	4.1c	8.0	12.1	0.7	10.5
All Other	3.6w	9.4	13.1	0.5	9.7
TOTAL	40.3	176.6	220.2	5.1	183.2
1958–59					
Asparagus	1.6	6.2	7.8	1.0p	6.5
Beans, lima	0.6	2.5	3.1	.....	2.6
Beans, snap	4.9	26.5	31.5	0.1	25.7
Beets	2.4	7.9	10.3	.....	7.7
Carrots	1.1	3.2	4.3	.....	3.0
Corn	4.5	27.1	31.6	0.2	29.3
Peas	7.5	29.6	37.1	0.3	28.3
Pumpkin	1.0	3.5	4.5	.....	3.6
Spinach	1.7	5.2	6.9	0.1	5.8
Tomatoes	2.7	30.5	37.1	0.3	30.6
Tomato Products					
Paste	1.6c	10.9	12.8	0.6p	10.0
Puree	1.1	4.3	5.4	.....	4.3
Catsup	1.4	4.6	6.0	.....	4.0
Chili sauce	0.2	0.7	0.9	.....	0.7
Sauce	1.6c	12.2	13.8	0.4p	9.6
All Other	3.4w	10.3	13.7	3.5	9.9
TOTAL	37.3	185.2	226.6	3.5	181.6
1959–60					
Asparagus	1.3	5.8	7.1	1.2p	6.0
Beans, lima	0.5	2.7	3.2	.....	3.0p
Beans, snap	5.6	25.3	30.9	.....	27.1
Beets	2.6	7.9	10.5	.....	8.2
Carrots	1.3	2.9	4.2	.....	2.6
Corn	2.3	33.8	36.1	.....	33.3p
Peas	3.8	25.7	34.5	.....	28.7
Pumpkn	0.9	3.7	4.6	.....	3.8
Spinach	1.1	7.1	8.2	.....	6.3
Tomatoes	6.5	24.1	33.6	.....	30.3
Tomato Products					
Paste	2.8c	7.9	11.0	0.7p	9.7
Puree	1.1c	3.5	4.6	.....	4.3
Catsup†	2.0	3.0	6.1	.....	5.4
Chili sauce†	0.2	0.6	0.8	0.1p	0.7
Sauce	4.2c	9.4	13.7	.....	11.3
All Other	3.8w	10.0	13.8	.....	10.9
TOTAL	45.0	173.4	222.9	2.0	191.6

CANNED AND BOTTLED JUICES (24/2)

Year	Carry In	Pack	Total Supply*	Exports	Total Shipt.
1931–32	0.5	6.5	7.0	.....	6.4
1932–33	0.6	7.8	8.4	.....	7.6
1933–34	0.8	7.7	8.5	.....	8.2
1934–35	0.3	15.1	15.4	.....	14.9
1935–36	0.5	21.8	22.3	.....	20.5
1936–37	1.8	35.0	36.8	.....	35.9
1937–38	0.9	40.2	41.1	1.0	34.2
1938–39	6.9	38.7	45.6	1.2	39.0
1939–40	6.6	44.4	51.0	1.2	48.0
1940–41	3.0	58.5	61.5	1.4	57.9
1941–42	3.6	60.9	64.5	2.0	61.4
1942–43	3.1	74.3	77.4	0.5	75.5
1943–44	1.9	79.3	81.2	0.3	78.8
1944–45	2.4	95.7	98.1	0.6	95.5
1945–46	2.6	108.9	111.5	4.9	106.7
1946–47	4.8	105.5	110.3	6.7	100.3
1947–48	10.0	98.8	109.4	4.2	101.0
1948–49	8.4	97.2	106.9	5.7	97.6
1949–50	9.3	90.9	103.2	5.6	95.0
1950–51	8.2	108.9	121.4	7.6	110.3
1951–52	11.1	103.7	115.6	7.7	104.9
1952–53	11.7	108.6	120.3	8.3	106.7
1953–54	13.6	113.9	130.2	8.3	106.8
1954–55	23.4	97.8	122.4	8.7	106.1
1955–56	16.3	98.4	114.7	9.4	102.8
1956–57	13.1	123.9	137.3	12.2	114.7
1957–58	22.6	105.3	128.1	14.0	110.5
1958–59	17.6	109.7	127.5	a	105.9
1959–60	21.6	104.6	126.2	a	104.6
1957–58					
Grapefruit	2.1	10.7	12.8	1.3	11.6
Lemon	0.2	0.7	0.9	d	0.7
Orange	1.8	18.4	20.2	3.6	18.9
Tangerine	0.2	0.3	0.5	d	0.5
Grapefrt-Org.	0.5	5.0	5.5	1.2	5.3
CITRUS	4.8	35.1	39.9	6.6	37.0
Apple	0.4w	4.4	4.8	d	4.4
Grape	0.5w	3.8w	4.3	d	4.2
Nectars	0.6w	9.0w	9.6	1.1	8.9
Prune	0.5w	7.4	7.9	d	7.3
Pineapple	5.6	12.5	18.1	1.1	14.6
Misc.	.....	0.2	0.3	3.4d	0.3
FRUIT	7.6	37.3	45.0	5.6	39.7
Tomato	10.2	32.6	42.8	1.8	33.4
Other veg.	.....	0.3	0.3	.....	0.3
VEG.	10.2	32.9	43.1	1.8	33.7
ALL JUICES	22.6	105.3	128.1	14.0	110.5
1958–59					
Grapefruit	1.2	11.4	12.6	a	10.9
Lemon	0.3w	0.8	1.0	a	0.8
Orange	1.3	14.3	15.6	2.3p	14.2
Tangerine	.....	0.8	0.8	a	0.6
Grapefrt-Org.	0.1	4.3	4.5	a	4.1
CITRUS	2.9	31.6	34.5	a	30.6
Apple	0.4w	5.2	5.6	a	5.0
Grape	0.1w	5.4w	5.5	a	5.0
Nectars	0.7w	8.2	8.9	a	8.1
Prune	0.6w	6.6w	7.2	a	6.6
Pineapple	3.5	15.2	18.9	a	14.4
Misc.	.....	a	a	a	a
FRUIT	5.3	40.6	46.1	a	39.1
Tomato	9.4	37.5	46.9	1.2	36.2
Other veg.	.....	a	a	.....	a
VEG.	9.4	37.5	46.9	a	36.2
ALL JUICES	17.6	109.7	127.5	a	105.9
1959–60					
Grapefruit	1.7	10.5p	12.2	a	10.2
Lemon	0.2	0.9p	1.1	a	0.8
Orange	1.4	17.2p	18.6	2.5p	16.6
Tangerine	0.2	0.2p	0.4	a	0.4
Grapefrt-Org.	0.4	4.5p	4.9	a	4.2
CITRUS	3.9	33.3	37.2	a	32.2
Apple	0.6w	6.6	7.2	a	6.2
Grape	0.5w	5.2w	5.7	a	5.1
Nectars	0.8w	9.0w	9.8	a	9.2
Prune	0.6w	6.0w	6.6	a	6.1
Pineapple	4.5	13.4	17.9	a	12.7
Misc.	.....	a	.....	a	.....
FRUIT	7.0	40.2	47.2	a	39.3
Tomato	10.7	31.1	41.8	0.9p	33.1
Other veg.	.....	a	.....	a	a
VEG.	10.7	31.1	41.8	a	33.1
ALL JUICES	21.6	104.6	126.2	a	104.6

a—Not available. d, h, n—Products combined as indicated. w—Partially estimated. p—Preliminary. c—California only. *Includes imports. †—Canned catsup and chili sauce only, excluding glass.

U. S. Packs of Canned and Bottled Juices — Non-Frozen Single-Strength

Year	SINGLE-STRENGTH CITRUS JUICES (b) Grapefruit	Lemon	Orange	Tangerine	Orange-Grapefruit	Orange-Tangerine	Tang.-Grapefruit	CITRUS TOTAL	NON-CITRUS FRUIT JUICES Apple	Grape (w/b)	Nectars (w)	Pineapple (t/b)	Prune (w/b)	Other	TOTAL NON-CITRUS	VEGETABLE Tomato	VEGETABLE Other	TOTAL ALL JUICES
Total U. S. Pack (Thousands of Actual Cases)																		
1939	9,657	133	3,578	.....	1,301	.....	.....	14,669	393	2,960	500wd	8,556	178	a	12,587	11,091	150w	38,497
1940	14,071	300	4,012	.....	2,285	.....	.....	20,668	506	3,000w	1,600w	10,808	250w	a	16,164	12,414	200w	49,446
1941	11,051	164	4,406	.....	2,043	.....	.....	17,664	1,726	2,400w	1,550w	8,563	550w	a	14,789	19,046	200w	51,699
1942	20,061	31	2,703	.....	3,108	.....	.....	25,903	1,645	2,700w	650w	8,830	1,800w	a	15,625	20,738	100w	62,366
1943	22,637	127	7,372	.....	5,563	.....	.....	35,699	1,740	1,400w	250w	8,298	2,300w	a	13,988	19,252	.....	68,939
1944	19,261	414	14,229	.....	7,016	.....	.....	40,920	2,851	1,800w	800w	7,957	3,200w	a	16,608	26,487	.....	84,015
1945	22,483	1,099	19,397	523	11,800d	d	d	55,302	1,316	2,400w	250w	8,671	4,291	a	16,928	24,553	.....	96,783
1946	15,173	490	17,135	1,253	9,076	d	d	43,127	3,524	3,710	1,400w	8,207	5,530	a	22,371	30,525	191	96,214
1947	14,869	774	23,993	556	10,568	137d	d	50,897	1,181	3,975	5,029	8,890	4,680	a	23,755	16,880	200w	91,732
1948	12,803	537	18,039	995	9,457	244d	d	42,175	1,181	3,870	1,900w	10,043	5,500w	a	22,494	23,701	200w	88,570
1949	10,795	828	17,667	1,351	6,492	42	213	37,338	2,761	3,350	3,000w	10,405	6,500w	a	26,016	20,560	300w	84,214
1950	16,298	513	20,871	1,009	8,269	.....	23	46,983	3,470	6,340	5,000w	11,699	5,500w	200	32,209	22,741	300w	102,233
1951	8,469	680	19,126	421	5,615	8	26	34,345	3,174	3,800	4,600w	10,797	6,000w	200	28,571	31,626	300w	94,842
1952	10,515	960	17,822	633	5,263	1	.....	35,194	3,199	5,370	4,500w	15,139	6,900w	200	35,308	31,417	300w	102,219
1953	14,638	459	17,491	679	5,577	.....	.....	38,844	3,081	6,370	5,000w	14,654	7,200w	200	36,505	32,733	300w	108,382
1954	11,041	734	18,771	360	4,363	.....	.....	35,269	4,219	7,154	11,103	14,292	7,519	200	44,487	23,466	496	103,718
1955	12,814	942	17,953	459	4,580	.....	1	36,749	3,508	6,750	10,000w	14,213	7,700w	200	42,371	23,699	500w	103,319
1956	13,535	876	20,059	603	4,492	.....	.....	39,565	4,266	8,080	10,500w	14,855	9,300	200	47,201	38,017	300w	125,083
1957	9,335	1,013	18,562	247d	4,140	d	d	33,297	4,653	6,120	11,500w	11,249	8,300	200	40,022	28,483	300w	102,102
1958	9,938	1,201	15,868	630	3,624	.....	.....	31,261	5,346	8,333	8,216	13,465	8,347	200	43,907	32,621	588	108,377
1959	9,400w	1,300w	17,000w	200w	3,800w	.....	.....	31,700	6,769	8,000w	10,000w	11,922	7,500w	200w	44,391	27,470	600w	104,161
U. S. Pack by Regions, 1958 (Thousands of Actual Cases)																		
Md.-Pa.-Va.	.....	.....	.....	.....	.....	.....	.....	.....	1,448	e	.....	.....	e	.....	1,448	e	.....	1,448
N. Y.	.....	.....	.....	.....	.....	.....	.....	.....	e	e	.....	.....	e	.....	a	2,134	e	2,134
Other E.	.....	.....	.....	.....	.....	.....	.....	.....	e	8,333e	.....	.....	e	e	8,333	e	e	8,333
East	.....	.....	.....	.....	.....	.....	.....	.....	1,448	8,333e	.....	.....	e	e	9,781	2,134	e	11,915
Ind.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	e	.....	e	.....	a	.....	.....	a
Mich.	.....	.....	.....	.....	.....	.....	.....	.....	996	e	e	.....	.....	.....	996	.....	.....	996
Other MW	.....	.....	.....	.....	.....	.....	.....	.....	e	e	e	.....	e	e	a	e	e	a
Midwest	.....	.....	.....	.....	.....	.....	.....	.....	996	e	e	.....	e	e	996	e	e	996
Fla.	8,819	.....	14,915	630	3,510	.....	.....	27,874	.....	.....	.....	.....	.....	e	.....	.....	.....	27,874
Texas	906	.....	182	.....	24	.....	.....	1,112	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,112
Other S.	.....	.....	.....	.....	.....	.....	.....	.....	e	.....	.....	.....	e	.....	a	e	.....	a
South	9,725	.....	15,097	630	3,534	.....	.....	28,986	e	.....	.....	.....	e	.....	a	e	.....	28,986
Calif.	e	1,201	e	.....	e	.....	.....	1,201	709	e	8,216e	.....	8,347	e	17,272	13,861	e	32,334
Other W.	213e	.....	771e	.....	90e	.....	.....	1,074	2,193e	e	e	13,465	e	200e	15,858	16,626e	588e	34,146
West	213	1,201	771	.....	90	.....	.....	2,275	2,902e	e	8,216e	13,465	8,347e	200e	33,130	30,487e	588e	66,480
TOTAL	9,938	1,201	15,868	630	3,624	.....	.....	31,261	5,346	8,333	8,216	13,465	8,347	200w	43,907	32,621	588	108,377
U. S. Pack by Regions, 1959 (Thousands of Actual Cases)																		
Md.-Pa.-Va.	.....	.....	.....	.....	.....	.....	.....	.....	1,799	e	.....	.....	e	.....	1,799	e	.....	a
N. Y.	.....	.....	.....	.....	.....	.....	.....	.....	e	e	.....	.....	e	.....	a	1,883	e	a
Other E.	.....	.....	.....	.....	.....	.....	.....	.....	e	8,000e	.....	.....	e	e	8,000	e	e	a
East	.....	.....	.....	.....	.....	.....	.....	.....	1,799	8,000e	.....	.....	e	e	9,799	1,883	e	a
Ind.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	e	.....	e	.....	a	e	.....	a
Mich.	.....	.....	.....	.....	.....	.....	.....	.....	1,082	e	e	.....	.....	.....	1,082	e	.....	a
Other MW	.....	.....	.....	.....	.....	.....	.....	.....	e	e	e	.....	e	e	a	14,669e	e	a
Midwest	.....	.....	.....	.....	.....	.....	.....	.....	1,082	e	e	.....	e	e	1,082	14,669e	e	a
Fla.	a	.....	a	a	a	.....	.....	a	.....	.....	.....	.....	.....	e	a	e	.....	a
Texas	a	.....	a	.....	a	.....	.....	a	.....	.....	.....	.....	.....	.....	a	e	.....	a
Other S.	.....	.....	.....	.....	.....	.....	.....	.....	e	.....	.....	.....	e	.....	a	e	.....	a
South	a	.....	a	a	a	.....	.....	a	e	.....	.....	.....	e	.....	a	e	.....	a
Calif.	a	a	a	.....	a	.....	.....	a	1,221	e	10,000e	.....	7,500e	e	18,721	10,918	e	a
Other W.	a	.....	a	.....	a	.....	.....	a	2,667e	e	e	11,922	e	200e	14,789	e	600e	a
West	a	a	a	.....	a	.....	.....	a	3,888e	e	10,000e	11,922	7,500e	200e	33,510	10,918	600e	a
Total	9,400w	1,300w	17,000w	200w	3,800w	.....	.....	31,700	6,769	8,000w	10,000w	11,922	7,500w	200w	44,391	27,470	600w	104,161
U. S. Pack by Containers, 1958 (Thousands of Actual Cases)																		
Indiv.	788	1,067	5,133	9	36	.....	.....	7,033	277	d	471	417	d	a	1,165	3,159	d	11,357
211-cyl.	93	.....	214	.....	12	.....	.....	319	88	d	1,719	1,620	d	a	3,427	1,348	d	5,089
#303	.....	.....	.....	.....	3	.....	.....	3	.....	d	.....	.....	d	a	.....	931	d	934
#2	2,074	.....	2,511	103	683	.....	.....	5,371	18	d	.....	1,930	d	a	1,948	3,810	d	11,129
3-cyl.	6,821	.....	7,555	511	2,853	.....	.....	17,740	1,722	d	3,098	8,966	d	a	13,786	18,680	d	50,206
#10	22	.....	17	.....	14	.....	.....	53	.....	d	d	372	d	a	372	519	d	944
Other	140	134	438	7	23	.....	.....	742	3,241	8,333d	2,928d	160	8,347d	200w	23,209	4,179	588d	28,718
TOTAL	9,938	1,201	15,868	630	3,624	.....	.....	31,261	5,346	8,333	8,216	13,465	8,347	200w	43,907	32,621	588	108,377
U. S. Pack by Containers, 1959 (Thousands of Actual Cases)																		
Indiv.	d	d	d	d	d	.....	.....	d	497	d	d	475	d	a	972	2,991	d	3,963
211-cyl.	d	d	d	d	d	.....	.....	d	61	d	d	1,370	d	a	1,431	1,314	d	2,745
#303	d	d	d	d	d	.....	.....	d	.....	d	d	.....	d	a	.....	567	d	567
#2	d	d	d	d	d	.....	.....	d	.....	d	d	1,670	d	a	1,670	2,524	d	4,194
3-cyl.	d	d	d	d	d	.....	.....	d	2,120	d	d	8,076	d	a	10,196	15,764	d	25,960
#10	d	d	d	d	d	.....	.....	d	.....	d	d	237	d	a	237	258	d	495
Other	9,400d	1,300d	17,000d	200d	3,800d	.....	.....	31,700	4,091	8,000d	10,000d	94	7,500d	200w	29,885	4,052	600d	66,237
TOTAL	9,400w	1,300w	17,000w	200w	3,800w	.....	.....	31,700	6,769	8,000w	10,000w	11,92	7,500w	200w	44,391	27,470	600w	104,161
U. S. Pack in Standard Cases (Thousands of Cases, 24/2 equivalent)																		
1949	12,213	555	19,456	1,489	7,395	a	a	41,108	2,589	a	a	11,967	a	a	a	23,542	a	a
1950	18,293	355	22,498	1,158	9,436	a	a	51,740	3,385	a	a	13,690	a	a	a	26,180	a	a
1951	9,235	450	20,936	456	6,640	a	a	37,717	3,020	a	a	12,227	a	a	a	36,160	a	a
1952	11,641	692	18,871	748	6,127	a	a	38,079	3,119	a	a	16,928	a	a	a	35,807	a	a
1953	15,951	319	18,622	800	6,528	a	a	42,220	3,021	a	a	16,375	a	a	a	37,754	a	a
1954	11,991	510	18,096	428	5,107	a	a	36,132	4,072	a	a	15,999	a	a	a	27,034	a	a
1955	13,766	653	16,603	555	5,388	a	a	36,965	3,355	a	a	16,222	a	a	a	26,921	a	a
1956	14,229	620	17,639	715	5,298	a	a	38,501	4,043	a	a	16,667	a	a	a	43,552	a	a
1957	10,707	708	18,349	302	4,959	a	a	35,025	4,426	3,800w	9,000w	12,511	7,400w	a	37,137	32,590	a	104,752
1958	11,387	828	14,255	760	4,353	a	a	31,583	5,236	6,400w	8,200	15,162	6,800w	a	40,598	37,467	a	109,648
1959	10,500p	900p	17,200p	200p	4,500p	a	a	33,300p	6,558	5,200w	9,000w	3,443	6,000w	a	40,201	31,116		104,617

a—Data not available. b—Pack year beginning year shown. d—Combined as indicated. w—Partially estimated. t—Pineapple juice pack includes Philippine production starting 1948. p—Preliminary.

Statistics

U. S. Packs of Juice Drinks and Concentrates — Non-frozen Canned and Bottled — Thousands of Gallons

Year	SINGLE-STRENGTH JUICE DRINKS							CONCENTRATES								
	Lemonade	Orangeade	Other Single Flavor	Grapefrt.-Pineapple	Tropical Punch	Other Blends	Total Drinks	Grapefruit Juice	Lemon Juice	Lime Juice	Orange	Tangerine	Orange-Grpfrt.	Other Citrus	Grape	Lemonade	All Other	Total Conc.
1941-42	----	----	----	----	----	----	a	19	99	----	2,319	----	----	a	a	a	a	2,437
1942-43	----	----	----	----	----	----	a	85	682	----	4,958	----	----	a	a	a	a	5,725
1943-44	----	----	----	----	----	----	a	46	277	----	3,209	----	----	a	a	a	a	3,532
1944-45	----	----	----	----	----	----	a	56	393	----	2,841	----	----	a	a	a	a	3,290
1945-46	----	----	----	----	----	----	a	130	280	----	1,182	----	----	a	a	a	a	1,592
1946-47	a	a	a	----	a	a	1,700w	43	244	----	4,779	----	----	a	a	a	a	5,066
1947-48	a	a	a	----	a	a	1,800w	1,667	446	----	4,667	----	----	a	a	a	a	6,780
1948-49	a	a	a	----	a	a	2,000w	150	579	----	4,667	----	----	a	a	a	a	5,396
1949-50	a	a	a	----	a	a	2,500w	232	523	----	4,745	----	----	a	a	a	a	5,500
1950-51	391	a	a	----	a	a	3,000w	344	280	----	5,781	----	----	a	a	391	a	6,796
1951-52	422	3,000w	a	----	a	a	4,000w	144	405	----	3,509	----	----	a	a	422	a	4,480
1952-53	485	4,000w	a	----	a	a	5,200w	271	589	----	3,988	----	----	a	a	485	a	5,333
1953-54	476	4,633	a	----	a	a	6,000w	319	489	----	3,685	----	----	a	a	476	a	4,969
1954-55	271	5,076	a	1,000w	a	a	7,000w	257	586	----	4,268	----	----	a	a	271	a	5,382
1955-56	368	6,087	a	3,000w	a	a	11,000w	308	545	----	4,645	25	----	a	a	368	a	5,891
1956-57	49	6,463	a	6,024	a	a	16,000w	315	1,094	----	5,609	32	----	a	a	224	a	7,274
1957-58	a	6,358	a	9,794	a	a	21,000w	355	1,350w	----	3,251	a	----	a	a	448w	a	5,404
1958-59	a	5,959	a	12,970	a	a	33,000w	442	695	----	4,276	23	a	a	a	a	a	5,436
1959-60p	a	5,500w	a	13,500w	a	a	36,000w	300w	1,000w	----	3,600w	----	----	a	a	a	a	a
U. S. Packs of Juice Drinks and Concentrates by Regions—1957-58																		
Calif.	a	a	a	a	a	a	a	247	1,350w	----	2,102	a	a	a	a	448w	a	4,147
Florida	a	a	a	a	a	a	a	108	----	----	1,149	a	a	a	a	----	a	1,257
Other	a	a	a	a	a	a	a	----	----	----	----	----	----	a	a	----	a	a
TOTAL	a	6,358	a	9,794	a	a	21,000w	355	1,350w	----	3,251	a	a	a	a	448w	a	5,404
U. S. Packs of Juice Drinks and Concentrates by Regions—1958-59																		
Calif.	a	a	a	a	a	a	a	277	695	----	3,729	----	----	a	a	a	a	4,701
Florida	a	a	a	a	a	a	a	165	----	----	547	23	----	a	a	a	a	735
Other	a	a	a	a	a	a	a	----	----	----	----	----	----	a	a	a	a	a
TOTAL	a	5,959	a	12,970	a	a	33,000w	442	695	----	4,276	23	----	a	a	a	a	5,436

U. S. Packs of Frozen Juices and Concentrates — Thousands of Gallons

Year	SINGLE-STRENGTH CITRUS JUICES				CITRUS JUICE CONCENTRATE								OTHER JUICES AND CONCENTRATES					
	Lemon	Orange	Other	Total	Grapefruit	Lemon	Lime	Orange	Tangerine	Orange-Grapefrt.	All Other	Total	Grape Conc.	Lemonade Conc.	Limeade Conc.	Other Conc.	Single Strength	Total
1941-42	d	100d	d	100	----	----	----	----	----	----	----	----	----	----	----	----	a	a
1942-43	d	138d	d	138	----	----	----	----	----	----	----	----	----	----	----	----	a	a
1943-44	d	420d	d	420	----	----	----	----	----	----	----	----	----	----	----	----	a	a
1944-45	d	500d	d	500	----	----	----	----	----	----	----	----	----	----	----	----	a	a
1945-46	219	733	64	1,016	----	----	----	226	----	----	----	226	----	----	----	----	a	a
1946-47	151	316	2	469	----	----	----	559	----	----	----	559	a	a	a	a	a	a
1947-48	231	832	2	1,065	----	----	----	2,373	----	----	----	2,373	a	a	a	a	a	a
1948-49	179	528	----	707	116	----	----	12,196	----	112	----	12,424	a	a	a	a	a	a
1949-50	549	432	----	981	1,665	91	----	25,137	----	1,336	----	28,229	1,014	1,702	a	a	a	2,716
1950-51	455	202	4	661	188	205	----	34,938	----	245	----	35,576	1,552	3,437	a	a	a	4,989
1951-52	805	204	----	1,009	1,098	317	----	47,743	349	536	----	50,043	2,457	5,751	a	a	a	8,208
1952-53	900	157	a	1,057	1,226	574	----	51,264	551	480	----	54,095	a	8,628	210	a	a	8,838
1953-54	984	39	----	1,023	1,677	1,316	----	66,978	443	965	----	71,379	a	9,845	a	a	a	9,845
1954-55	794	382	----	1,176	1,155	908	----	68,558	877	561	----	72,059	a	8,268	992	a	a	9,260
1955-56	1,167	393	----	1,560	2,542	854	----	74,061	619	954	----	79,030	a	10,388	1,320	a	a	11,708
1956-57	1,210	495	----	1,705	2,949	1,691	----	75,067	793	597	----	81,097	a	10,051	684	a	a	10,735
1957-58	573w	288	a	861	3,330	1,575w	----	58,631	146	507	----	64,189	a	11,850w	438	a	a	12,288
1958-59	598	a	a	598	4,998	2,216	----	83,599	1,152	690	----	92,655	4,170	12,807	a	a	a	16,977
1959-60p	800w	a	a	a	1,611p	2,000w	----	80,000w	320p	271p	----	84,202p	a	a	a	a	a	a
U. S. Packs of Frozen Juices and Concentrates by Regions—1957-58																		
Calif.	573w	288	a	861	----	1,575w	----	1,480	----	----	----	3,055	a	11,850w	49	a	a	11,899
Florida	----	----	----	----	3,330	----	----	57,151	146	507	----	61,134	a	----	389	a	a	389
Other	----	----	----	----	----	----	----	----	----	----	----	----	a	----	----	a	a	a
TOTAL	573w	288	a	861	3,330	1,575w	----	58,631	146	507	----	64,189	a	11,850w	438	a	a	12,288
U. S. Packs of Frozen Juices and Concentrates by Regions—1958-59																		
Calif.	598	a	a	598	46	2,216	----	3,688	----	----	----	5,950	----	12,807	a	a	a	12,807
Florida	----	a	----	----	4,952	----	----	79,911	1,152	690	----	86,705	----	----	a	a	a	a
Other	----	a	----	----	----	----	----	----	----	----	----	4,170	----	----	a	a	a	4,170
TOTAL	598	a	a	598	4,998	2,216	----	83,599	1,152	690	----	92,655	4,170	12,807	a	a	a	16,977

a—Not available. w—Estimated. p—Preliminary. d—Products combined as indicated. x—Includes glass.

Quality Northwest Fruits and Vegetables

Canned Apples
Canned Berries
Canned Purple Plums
Canned Onions
Canned Wax Beans
Canned Blue Lake Beans
Frozen Pitted Purple Plums
Frozen Berries
Brined Cherries

Brands
LASSELLE
FOREST GROVE
SHERWOOD
TEMPTING
REAL
WONDER-PAK
WEST TRADE

Office
SHERWOOD, OREGON

Plants
SHERWOOD, OREGON
FOREST GROVE, OREGON

CANNING
PORTLAND
COMPANY

QUALITY CANNED FOODS

PHILLIPS—GIBBS—or BUYER'S LABEL

SOUPS—PORK and BEANS—OTHER DRY PACK

COASTAL FOODS CO.,

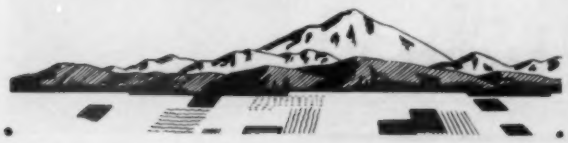
DIVISION CONSOLIDATED FOODS CORPORATION
CAMBRIDGE, MD., U. S. A.

More profit for you with **CEDERGREEN** quality!

Join the world's leading private and brand labels who rely on Cedergreen, America's oldest packers of frozen foods.

You can always depend on the quality of the Cedergreen line . . . every item packed under continuous U.S.D.A. inspection.

CEDERGREEN FROZEN FOODS
"since 1938"
WENATCHEE, WASHINGTON, U. S. A.



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We furnish the QUALITY PRODUCTS from CALIFORNIA'S finest growing areas

- **Asparagus** (Spears, Cuts & Tips, Cuts)
- **Baby Lima Beans**
- **Broccoli** (Spears, Cuts, Chopped)
- **Brussels Sprouts**
- **Carrots**
- **Cauliflower** (Snowball Variety)
- **Fordhook Lima Beans**
- **Strawberries**
- **Peaches**
- **Peas** (Green)
- **Snap Beans—Blue Lake** (French & Regular Cut)
- **Speckled Butterbeans**
- **Spinach** (Leaf & Chopped)

JOHN INGLIS FROZEN FOODS COMPANY
Headquarters Office—Modesto, California

JI

U. S. Frozen Fruit Packs—Millions of Pounds

Year	BERRIES										OTHER FRUITS									GRAND TOTAL
	Black	Blue	Boysen	Goose	Logan	Black Rasp.	Red Rasp.	Straw	Misc.	TOTAL	Apples & Sauce	Apricots	Red Cher.	Sweet Cher.	Currants	Grape	Peach	Pineapple	Plums	Misc.	
Total U. S. Pack (Millions of Pounds)																				
1939	7.4	1.1	0.3	0.1	1.4	2.0	8.4	50.8	5.5	77.0	2.1	0.3	39.7	.....	1.3	8.8	6.8	.....	0.2	2.9	139.1
1940	9.6	2.6	0.2	0.1	2.5	2.5	14.0	62.3	11.4	105.2	4.0	0.2	40.0	0.1	0.4	10.0	5.4	.....	0.2	4.1	169.6
1941	9.0	2.2	1.7	0.1	3.5	8.1	14.2	79.5	2.8	121.1	10.0	0.7	43.2	0.5	2.0	16.8	6.6	0.1	0.3	5.3	206.6
1942	10.0	3.4	2.1	0.6	2.8	6.2	15.5	63.8	2.1	106.5	15.1	5.3	52.5	0.2	3.5	19.6	14.3	0.3	3.0	5.5	225.8
1943	11.7	7.4	3.8	1.5	1.8	6.5	17.1	34.2	2.3	86.3	41.9	19.9	31.2	0.6	2.7	17.9	24.0	0.7	24.6	5.0	254.8
1944	17.5	5.1	4.2	1.8	3.3	5.6	13.6	35.4	3.2	89.7	55.2	42.6	56.3	1.4	4.8	9.8	45.7	0.9	18.2	8.9	333.5
1945	21.5	7.8	7.1	1.6	2.5	3.5	13.3	37.4	2.6	97.3	93.0	65.2	16.1	10.3	2.7	10.2	103.6	3.3	20.0	10.6	432.3
1946	19.8	10.2	10.9	1.4	3.4	5.5	23.9	78.8	2.5	156.4	78.2	43.6	88.1	7.8	4.2	12.4	65.1	23.0	16.7	27.3	522.8
1947	14.5	5.4	12.8	0.1	2.4	7.1	25.4	109.0	1.4	178.1	28.6	6.3	67.0	0.7	4.1	21.0	27.0	5.9	2.9	7.1	348.7
1948	9.7	7.7	9.1	.....	4.2	4.5	23.2	161.8	1.2	221.4	27.6	2.5	87.8	0.6	3.9	5.5	13.6	3.7	2.2	8.5	377.3
1949	15.2	14.0	14.1	.....	3.4	6.2	25.7	107.6	0.6	186.8	52.3	2.1	71.0	3.0	2.5	3.1	23.2	1.0w	5.3	0.7	351.0
1950	9.0	10.9	9.4	0.2	2.6	10.9	20.4	192.7	0.4	256.5	48.0	7.8	104.5	0.7	1.3	15.2	25.8	1.5w	5.2	7.2	473.7
1951	14.6	13.9	9.3	0.1	2.4	9.6	19.4	157.7	0.1	227.1	28.8	9.9	99.3	2.3	1.5	4.8	32.4	d	6.8	3.0d	415.9
1952	10.6	9.8	9.7	0.1	1.8	9.0	18.4	200.3	.....	259.7	37.6	4.2	61.9	2.4	2.9	4.9	35.5	d	3.6	7.6d	420.3
1953	18.0	14.0	9.7	0.1	2.3	9.0	24.9	226.0	.....	314.0	42.4	4.0	115.2	1.7	3.8	10.1	32.2	a	8.4	20.3	542.0
1954	14.2	21.0	12.7	0.2	2.6	8.3	23.5	221.4	0.1	304.0	60.0	5.4	86.7	3.6	2.0	9.4	36.4	a	4.5	10.7	523.0
1955	16.5	21.0	16.6	0.8	1.9	8.2	25.7	273.0	0.1	363.8	72.8	12.3	114.5	2.8	2.0	11.1	50.6	a	3.8	26.1	659.8
1956	12.8	19.6	18.1	0.3	1.4	7.8	9.2	312.3	.....	381.5	87.0	4.6	88.7	5.2	2.5	14.9	45.5	a	4.0	60.4	694.3
1957	19.1	24.4	13.4	0.2	1.3	15.1	30.4	259.3	.....	363.2	69.2	8.3	130.6	4.1	1.7	15.5	44.5	a	1.3	33.0	671.4
1958	13.6	16.0	19.8	1.0	1.5	13.1	24.5	261.5	.....	351.0	67.4	6.9	86.2	6.1	1.4	20.4	43.8	a	3.6	24.1	610.4
1959	15.8	16.4	13.1	0.3	1.0	10.2	24.7	248.2	.....	329.7	72.3	7.5	107.4	1.8	2.0	13.2	47.3	a	2.4	34.0	617.6
U. S. Pack by Regions, 1958 (Millions of Pounds)																				
N.Y.	.....	f	.....	.....	.....	1.0	0.1	0.6	.....	1.7	22.4	.....	31.9	a	e	.....	e	a	a	a	56.0
Other	e	9.7f	0.4	.....	.....	0.4e	0.1e	2.4	.....	13.0	2.9	.....	6.7	a	0.7e	13.0	2.4e	a	0.5f	0.6	41.3
N.E.	e	9.7ef	0.4e	.....	.....	1.4e	0.2e	3.0	.....	14.7	25.3	.....	38.6a	a	0.7	13.0	2.4	a	0.5ef	0.6	97.3
Midwest	.....	5.3	f	.....	f	3.6	0.9	9.4	.....	19.2	22.3	.....	41.2	a	0.4	7.3e	7.4	a	e	0.8	100.4
South	0.5e	e	e	.....	.....	e	e	28.3	.....	28.8	2.4	.....	e	a	.....	e	2.5	a	.....	6.0	39.8
Calif.	2.3*	.....	15.9	.....	.....	.....	.....	133.5*	.....	141.2	19.6*	2.8	.....	a	.....	.....	29.0	a	4.1*	1.9	194.2
Wash.-Ore.	12.1	1.0	1.6	1.0	0.6	8.1	23.4	96.5	.....	144.3	.....	3.7	1.0	a	0.2	.....	1.6	a	1.2	6.2	158.2
Other W	.....	.....	1.9	.....	0.9	.....	.....	.....	.....	2.8	.....	0.4	5.4	6.1	0.1	e	0.6	a	.....	8.6	17.9
West	13.1*	1.0	19.4f	1.0	1.5f	8.1	23.4	220.8	.....	288.3	17.4*	6.9	6.4	a	0.3	e	31.2	a	3.1	16.7	372.9*
TOTAL	13.6	16.0	19.8	1.0	1.5	13.1	24.5	261.5	.....	351.0	67.4	6.9	86.2	6.1	1.4	20.3	43.5	a	3.6	24.1	610.4
U. S. Pack by Regions, 1959 (Millions of Pounds)																				
N. Y.	.....	f	.....	.....	.....	0.6	0.2e	1.5	.....	2.3	27.5	.....	26.6	a	e	.....	e	a	e	a	56.4*
Other	e	11.1f	e	.....	.....	1.2e	.....	1.8	.....	14.1	1.5	.....	5.2e	a	0.3	10.4	1.8e	a	0.5e	0.7	34.5
N. E.	e	11.1ef	e	.....	.....	1.8e	0.2e	3.3	.....	16.4	29.0	.....	31.8e	a	0.3e	10.4	1.8e	a	0.5e	0.7	83.3
Midwest	e	4.5	e	.....	e	3.2	0.9	17.2	.....	25.8	24.2	.....	71.5	a	1.2	2.8e	6.0	a	e	0.3	137.7*
South	0.2e	e	e	.....	.....	e	e	17.0	.....	17.2	3.2	.....	e	a	.....	e	2.1	a	.....	9.4	32.5*
Calif.	2.6	.....	9.4	.....	.....	.....	.....	82.9*	.....	91.6	15.6	6.7*	.....	e	.....	.....	35.7	a	6.2*	2.8	152.3
Wash.-Ore.	13.0	0.8	3.4	0.3	0.9	5.0	23.3	131.1	.....	177.8	.....	1.3	2.1	1.8e	0.4	.....	0.4	a	1.5	3.4	188.7
Other W	.....	.....	0.3e	.....	0.1e	0.2	0.3	.....	.....	0.9	0.3	.....	2.0	a	0.1	e	1.3	a	.....	17.4	22.0
West	15.6	0.8	13.1	0.3	1.0	5.2	23.6	210.7*	.....	270.3	15.9	7.5*	4.1	1.8	0.5	e	37.4	a	1.9	23.6	364.1*
TOTAL	15.8	16.4	13.1	0.3	1.0	10.2	24.7	248.2	.....	329.7	72.3	7.5	107.4	1.8	2.0	13.2	47.3	a	2.4	34.0	617.6
U. S. Pack by Containers, 1958 (Millions of Pounds)																				
2 Oz—less	0.4	1.3	0.4	.....	.....	.....	10.8	132.3	.....	145.2	.....	.....	2.7	.....	.....	.....	4.7	a	.....	6.3	163.8
10#—less	.....	0.3	0.5	.....	.....	.....	1.0	20.9	.....	22.7	4.9	.....	.....	.....	.....	.....	11.4	a	.....	2.2	40.0
30#	7.4	6.8	16.5	.....	1.3	5.8	9.0	95.8	.....	142.6	54.8	5.8	74.6	4.2	.....	1.0	23.3	a	3.0	13.1	322.8
Others-lge.	2.2	7.6	1.2	.....	0.1	.....	2.2	4.0	.....	17.3	7.7	.....	.....	.....	.....	.....	4.1e	a	.....	1.5	47.1
Barrels	3.6	.....	1.2	.....	0.1	4.3	1.5	8.5	.....	19.2	.....	.....	0.2	1.4	0.9	11.0	e	a	0.7	1.0	36.7
Misc.	.....	.....	.....	1.0	.....	3.0	.....	.....	.....	4.0	.....	1.1	8.7	0.5	0.5	8.3	.....	a	.....	.....	.....
TOTAL	13.6	16.0	19.8	1.0	1.5	13.1	24.5	261.5	.....	351.0	67.4	6.9	86.2	6.1	1.4	20.3	43.5	a	3.6	24.1	610.4
U. S. Pack by Containers, 1959 (Millions of Pounds)																				
2 Oz—less	0.7e	0.9	1.5	.....	.....	.....	10.5	102.2	.....	115.8	.....	.....	1.1	.....	.....	.....	4.5	a	.....	5.1	126.8
10#—less	e	0.1	0.3	.....	.....	.....	0.7	20.0	.....	21.1	0.5	.....	.....	.....	.....	.....	9.3	a	.....	5.0	38.2
30#	7.2	8.5	6.7	.....	0.6	4.9	6.7	104.3	.....	138.9	65.8	3.4	100.6	0.1	.....	.9	26.3	a	1.3	20.9	358.9
Others-lge.	3.3	6.9	2.7	.....	0.2	.....	4.6	6.7	.....	24.4	6.0	.....	.....	.....	.....	.....	7.2e	a	.....	1.1	48.5
Barrels	4.6	.....	1.9	.....	0.2	3.0	2.2	15.0	.....	26.9	.....	.....	3.9	1.6	0.6	6.8	e	a	1.0	1.9	45.2
Misc.	.....	.....	.....	0.3	.....	2.3	.....	.....	.....	2.6	.....	4.1	1.8	0.1	1.4	5.5	.....	a	0.1	.....	a
TOTAL	15.8	16.4	13.1	0.3	1.0	10.2	24.7	248.2	.....	329.7	72.3	7.5	107.4	1.8	2.0	13.2	47.3	a	2.4	34.0	617.6

e—Regions or sizes combined as indicated. *—Includes some quantities not reported by NAFFP. f—Regions combined as indicated. a—Not available. d—Products combined as indicated. w—Partially estimated. S—included in above totals.

California Dried Figs at Their Best!

BLUE RIBBON BRAND— *Softenized*

Carefully graded Calimyrna figs, made tenderer, more succulent by our *Softenizing* process. Packed in a new foil carton that glows on the shelf, protects quality and brings 'em back for repeat sales.

Also packed in 12-oz. visual printed bags and various sizes of cellophane packs. A sensational impulse seller!

CALIFORNIA FIG GROWERS & PACKERS

P.O. Box 1987, Fresno, Calif.

U. S. Frozen Vegetable Packs—Millions of Pounds

Year	Asparagus	Snap Beans	Lima Beans	Broccoli	Brus. Sprouts	Carrots	Cauliflower	Corn (cut)	Corn (cob)	Peas (Green)	Peas & Carrots	Pumpkin	Rhubarb	Spinach	Succotash	Other Mixed	All Other	GRAND TOTAL
Total U. S. Pack (Millions of Pounds)																		
1939	7.4	6.0	15.4	2.7	0.7	0.4	0.7	3.0	2.6	26.6	0.5	0.9	a	3.7	.....	.....	2.0	72.6
1940	5.9	6.0	16.8	1.9	0.8	2.0	0.7	4.5	2.9	35.8	0.4	0.6	a	4.1	.....	.....	0.9	83.3
1941	7.5	8.8	20.5	3.5	1.9	1.1	1.5	6.9	2.7	44.1	1.1	1.7	a	9.5	.....	d	0.5d	111.3
1942	5.8	13.8	30.4	3.2	3.7	1.1	1.2	11.0	2.3	66.2	1.1	2.6	0.8	16.6	0.1	1.0	1.8	162.7
1943	11.7	26.5	23.7	5.5	5.9	2.9	3.5	21.5	0.8	75.6	8.3	12.2	4.4	29.7	0.2	2.2	2.7	237.3
1944	12.4	23.8	29.6	7.4	4.9	0.9	6.8	21.0	0.6	79.2	2.1	10.0	4.4	32.1	1.1	2.2	.....	238.5
1945	20.6	31.5	28.5	11.9	6.6	6.0	7.5	25.6	0.5	103.8	5.3	7.4	6.9	36.7	1.8	5.6	1.8	308.0
1946	28.3	41.0	51.1	25.8	14.5	9.1	13.2	42.4	2.3	140.6	7.2	10.0	10.6	38.3	3.4	13.1	2.5	453.4
1947	10.7	31.2	68.2	10.6	4.6	2.9	5.3	26.6	6.1	131.8	5.3	5.2	1.5	23.3	3.8	6.0	5.0	348.1
1948	18.3	49.6	75.4	29.1	10.5	15.4	14.0	20.9	10.3	119.0	6.5	5.6	2.6	41.6	6.9	9.4	11.3	446.4
1949	18.4	58.5	87.9	45.2	23.5	12.8	21.7	37.1	17.6	113.3	8.1	8.3	4.2	62.3	8.3	15.9	20.4	563.5
1950	22.3	65.5	86.0	41.0	22.4	13.3	12.3	33.0	10.1	152.3	11.3	8.3	6.2	52.8	6.7	15.2	28.4	587.1
1951	23.5	81.6	108.0	48.8	22.5	10.6	22.5	44.5	8.8	195.5	13.0	12.7	5.8	97.9	11.9	26.1	36.3	770.0
1952	25.5	87.4	113.9	82.3	22.5	22.3	33.2	62.7	14.2	203.7	18.0	15.1	5.7	91.5	11.8	26.5	59.7	896.0
1953	32.9	114.9	138.5	89.0	40.8	29.3	35.7	104.8	17.2	233.0	19.5	9.4	8.3	87.9	14.1	30.9	97.2	1,103.3
1954	25.8	123.3	129.6	62.0	33.4	27.4	17.0	78.2	16.7	212.4	14.5	13.0	6.7	66.9	9.3	23.8	114.6	974.6
1955	28.7	121.0	117.7	96.2	23.1	34.4	40.1	70.0	6.9	231.2	13.9	17.9	5.6	110.3	7.2	30.7	184.8	1,139.7
1956	37.7	137.7	143.6	118.3	44.0	51.0	47.2	118.2	20.4	359.7	24.1	24.2	7.4	104.5	12.4	42.1	240.5	1,533.0
1957	31.2	134.4	131.4	80.5	33.4	34.2	22.7	112.9	13.7	295.8	21.0	13.2	4.7	102.1	10.0	41.5	283.9	1,366.6
1958	24.4	156.0	125.9	109.7	30.4	53.7	33.3	111.0	10.4	251.9	21.5	18.0	4.4	97.5	8.9	37.3	338.9	1,433.2
1959	32.7	149.0	114.0	103.2	38.7	55.5	33.6	121.0	9.9	305.0	20.3	15.7	4.6	121.9	6.4	34.1	461.0	1,626.6
U. S. Pack by Regions, 1958 (Millions of Pounds)																		
N/ESouth	10.1e	89.6	33.8	28.0	e	13.5e	9.6e	29.5	2.0	44.0	4.5e	7.4	0.8	45.3	4.4	7.8	138.0e	482.9
Midwest	1.1	0.9	2.5	e	.....	e	e	27.8	3.6	32.8	e	.....	0.3	.....	1.7	5.2	e	75.8
Calif.	7.0	20.7	75.5	62.6	29.5	11.5	16.3	.....	.....	5.6	.....	.....	.....	43.4	.....	4.6*	a	276.7
Wash.-Ore.	6.1	44.8	.....	18.4	.....	28.5	7.2	48.4	4.2	157.2	16.6	.....	2.5	7.4	2.7	22.8*	15.1	381.9
Other West	0.2	.....	14.1	0.7e	0.9e	0.2	0.2	5.3	0.4	12.3	0.4	10.6	0.8	1.4	0.1	.....	185.8	215.9
West	13.3	65.5	89.6	81.7	30.4	40.2	23.7	53.7	4.6	175.1	17.0	10.6	3.3	52.2	2.8	24.3*	200.9x	874.5
TOTAL	24.4	156.0	125.9	109.7	30.4	53.7	33.3	111.0	10.4	251.9	21.5	18.0	4.4	97.5	8.9	37.3	338.9	1,433.2
U. S. Pack by Regions, 1959 (Millions of Pounds)																		
N/ESouth	12.7	83.5	26.5	18.6	e	10.0	3.6e	27.7	2.5	47.7	2.8e	11.1e	0.7	49.0	1.7	2.0	179.9x	480.0
Midwest	0.9	1.4	3.1	e	.....	.....	e	31.8	1.4	27.0	e	e	0.8	.....	2.1	5.6	7.6	81.7
Calif.	11.0	21.4	70.5	67.0*	37.2	12.3	23.5	.....	.....	12.0	.....	.....	.....	60.7	.....	.....	6.0y	321.6
Wash.-Ore.	8.1	42.7	.....	17.9*	.....	32.9	6.5	57.4	5.8	192.3	16.5	.....	2.0	9.0	2.3	24.1	9.6y	426.8
Other West	.....	.....	13.9	.....	1.5e	0.3	.....	4.1	0.2	26.0	1.0	4.6	1.1	3.2	.3	2.4	257.9xx	316.5
West	19.1	64.1	84.4	84.6e	38.7	45.5	30.0	61.5	6.0	230.3	17.5	4.6	3.1	72.9	2.6	26.5	273.5	1,064.9
TOTAL	32.7	149.0	114.0	103.2	38.7	55.5	33.6	121.0	9.9	305.0	20.3	15.7	4.6	121.9	6.4	34.1	461.0	1,626.6
U. S. Pack by Containers, 1958 (Millions of Pounds)																		
1#—less	14.8	97.9	75.5	83.1	23.5	.....	22.6	47.4	a	119.4	19.6	13.3	2.5	72.5	8.2	27.8	181.0	820.4
10#—less	7.3	29.7	20.9	26.2	6.8	1.7	10.7	12.6	a	25.0	1.8	4.3	0.3	24.3	0.7	7.5	12.1	217.3
30#	.....	0.5	.....	.....	.....	d	.....	0.2	a	0.5	.....	.....	1.1	.....	.....	.....	.....	84.7
50#	.....	18.6	7.5	.....	.....	25.9	.....	13.4	a	36.5	.....	.....	.....	.....	.....	.....	.....	103.6
Misc.	2.3	9.3	22.0	0.4	0.1	26.1d	.....	37.4	10.4a	70.5	0.1	0.4	0.5	0.7	.....	2.0	145.8	207.2
TOTAL	24.4	156.0	125.9	109.7	30.4	53.7	33.3	111.0	10.4	251.9	21.5	18.0	4.4	97.5	8.9	37.3	338.9	1,433.2
U. S. Pack by Containers, 1959 (Millions of Pounds)																		
1#-less	19.5	87.5	65.7	78.0	27.4	.....	22.0	50.0	a	137.1	16.0	8.8	1.9	86.2	5.6	23.3	240.6	869.6
10#-less	11.2	27.5	19.3	24.2	11.2	1.9	11.6	13.6	a	35.2	2.0	6.7	0.4	34.7	0.7	6.5	22.8	229.5
30#	.....	.....	.....	.....	.....	d	.....	0.3	a	1.0	.....	.....	1.7	.....	.....	.....	0.5	3.5
50#	.....	18.3	7.2	.....	.....	27.5	.....	14.5	a	59.3	.....	.....	.....	.....	.....	.....	6.4	133.2
Poly. Bags	.....	.....	1.9	.....	.....	.....	.....	1.8	a	8.2	2.1	.....	.....	.....	.....	2.3	2.8	19.1
Misc.	2.0	15.7	19.9	1.0	0.1	26.1	.....	40.8	9.9a	64.2	0.2	0.2	0.6	1.0	0.1	2.0	187.9	371.7
TOTAL	32.7	149.0	114.0	103.2	38.7	55.5	33.6	121.0	9.9	305.0	20.3	15.7	4.6	121.9	6.4	34.1	461.0	1,626.6

a—Not available. d—Combined as indicated. e—Regions combined as indicated. *—Northwest report by NAFFP, plus California report by WFFPA, total more than West Total reported by NAFFP. z—Predominantly potatoes. #—Potatoes only. y—No potatoes. x—Includes Wash.-Ore. and Calif. potatoes.

DON'T Lose this issue of CANNER/PACKER

Replacements are $1 each.

PUYALLUP & SUMNER SALES CORP.
Packers of Northwest
Frozen Fruits-Berries
Retail & Institutional
2045 Milwaukee Avenue
Puyallup, Washington

FROZEN BERRIES—INSTITUTIONAL—RETAIL
Buyers Label or "Berry Treat" Brand
Washington Farmers Product Control Board
828 13th St. SE
Puyallup, Wash.

Statistics

U. S. Frozen Food Packs — Millions of Lbs.

Year	Fruits	Vegetables except Potatoes	Juices, Citrus	Juices, Other & Ades	Eggs	Fish	Meats (w)	Poultry (w)	Convenience Foods	All Other	TOTAL PACK
1941	206.6	111.3	1.0	a	237.2	246.6	15.0	20.0	----	a	837.7
1942	225.8	162.7	1.4	a	257.6	247.2	15.0	50.0	1.0	a	960.7
1943	254.8	237.3	4.2	a	412.6	246.1	20.0	80.0	20.0	a	1,275.0
1944	333.5	238.5	5.0	a	511.8	266.5	25.0	110.0	15.0	a	1,505.3
1945	432.3	307.0	12.4	a	397.6	286.0	25.0	140.0	30.0	a	1,630.3
1946	522.8	448.4	10.3	a	392.2	280.1	20.0	170.0	47.0	a	1,890.8
1947	348.7	343.1	44.4	a	371.1	246.6	15.0	130.0	50.0	a	1,548.9
1948	377.3	441.4	131.3	a	345.2	292.0	25.0	150.0	40.0	p	1,802.2
1949	351.0	558.5	292.1	27.2	318.2	285.8	27.0	224.0	60.0	a	2,143.8
1950	473.7	577.1	362.4	49.9	354.1	287.2	35.0	411.0	75.0	a	2,625.4
1951	415.9	735.0	511.1	82.1	339.5	325.5	55.0	582.0	135.0	a	3,181.1
1952	420.3	846.0	551.5	88.4	320.4	313.2	80.0	800.0	200.0	a	3,619.8
1953	542.0	1,032.6	724.0	98.5	343.1	275.4	125.0	850.0	250.0	a	4,885.6
1954	523.0	889.4	732.4	92.6	361.2	302.7	175.0	950.0	382.9	a	4,409.2
1955	659.8	1,010.8	805.9	117.1	341.5	314.7	250.0	1,000.0	604.9	a	5,104.7
1956	694.3	1,343.4	828.0	107.4	349.1	325.0	325.0	1,080.0	750.0	a	5,802.2
1957	671.4	1,146.7	650.5	122.9	333.8	314.2	365.0	1,180.0	1,000.0	a	5,784.5
1958	610.4	1,163.8	932.5	169.8	341.5	322.2	500.0	1,300.0	1,485.2	a	6,825.4
1959p	617.6	1,225.6	870.0p	170.0p	495.7	336.6	400.0	1,300.0	1,700.0p	a	7,055.5

U. S. Frozen Egg Packs—Millions of Lbs.

Year	Whole	Albumen	Yolk	Total
1941	a	a	a	237.2
1942	166.3	51.0	40.3	257.6
1943	309.6	60.3	42.7	412.6
1944	393.7	64.9	53.2	511.8
1945	292.7	65.8	39.1	397.6
1946	231.7	94.6	65.9	392.2
1947	230.4	79.3	61.4	371.1
1948	185.1	89.6	70.5	345.2
1949	190.1	77.8	50.3	318.2
1950	200.3	92.7	61.1	354.1
1951	175.3	95.0	69.2	339.5
1952	148.7	102.9	68.8	320.4
1953	162.2	104.4	76.5	343.1
1954	162.3	110.1	88.8	361.2
1955	151.8	101.3	88.4	341.5
1956	156.9	108.6	83.6	349.1
1957	149.4	101.9	82.5	333.8
1958	150.4	104.1	87.0	341.5
1959	218.7	117.3	99.7	435.7

U. S. Frozen Fish Packs—Millions of Lbs.

Year	All Fresh Water	Shrimp	All Shell Fish	Fillets	Halibut	Salmon	Whiting	All Salt Water	TOTAL EXCEPT CONV.x
1941	17.8	19.8	26.7	72.1	19.1	15.2	32.3	202.1	246.2
1942	20.6	14.6	18.5	64.5	16.7	14.9	38.7	208.2	247.9
1943	23.2	14.2	21.3	43.4	16.1	15.3	33.0	201.5	246.1
1944	17.0	15.7	22.1	63.5	21.3	18.8	25.7	227.5	266.5
1945	11.8	24.8	32.2	99.3	27.3	30.0	19.8	242.0	286.0
1946	7.7	25.5	36.3	111.1	30.4	29.2	12.1	236.1	280.1
1947	6.3	28.3	39.4	89.4	26.0	16.5	16.7	200.9	246.6
1948	9.0	28.1	37.9	120.3	30.0	14.0	26.3	245.1	292.0
1949	7.4	32.5	44.6	101.2	30.7	18.0	35.7	223.8	285.8
1950	7.9	55.7	66.4	106.5	32.7	12.7	23.7	212.9	287.2
1951	7.4	58.6	69.8	117.9	26.0	13.5	48.9	248.2	325.5
1952	9.2	55.0	64.3	106.1	31.3	13.2	39.9	239.7	313.2
1953	7.5	56.7	72.4	67.4	26.8	14.2	34.5	195.6	275.4
1954	4.4	58.1	68.5	96.3	35.2	15.7	31.7	206.8	302.7
1955	4.6	50.0	62.8	79.7	26.6	10.3	35.6	207.1	314.7
1956	3.5	65.1	75.5	72.5	34.1	16.5	26.0	199.3	325.0
1957	3.1	74.0	89.1	56.1	28.1	10.1	35.7	170.0	314.2
1958	4.4	78.7	90.5	65.9	32.1	11.5	29.1	173.0	322.2
1959	3.3	a	109.5	a	a	a	a	169.4	336.6

U. S. Frozen Convenience (Pre-cooked or Prepared) Food Packs—Millions of Lbs.

Year	BAKERY: Pies	BAKERY: Other	FISH: Shellfish	FISH: Sticks	MEATS: Other	MEATS: Pies	MEATS: Other	Nationality Foods	POULTRY: Pies	POULTRY: Other	Soups	VEGETABLES: Potato Prods.	VEGETABLES: All Other	All Other Foods	TOTAL CONVENIENCE
1941	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1942	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.0	1.0
1943	d	1.0dw	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12.9	6.1	20.0
1944	d	3.0dw	.....	.....	.....	.....	1.0w	.....	.....	.....	.....	.....	4.0w	7.0	15.0
1945	d	6.0dw	.....	.....	.....	.....	4.0w	.....	.....	.....	.....	1.0w	1.0w	18.0	30.0
1946	d	12.0dw	.....	.....	a	d	6.0dw	e	d	d	.....	5.0w	e	24.0e	47.0
1947	d	23.0dw	.....	.....	a	d	7.0dw	e	d	d	.....	5.0w	e	15.0e	50.0
1948	d	25.0dw	.....	.....	a	d	5.0dw	e	d	d	.....	5.0w	e	5.0e	40.0
1949	d	35.0dw	.....	.....	a	d	10.0dw	e	d	d	.....	5.0w	e	10.0e	60.0
1950	d	40.0dw	1.0w	.....	a	d	14.0dw	e	d	d	e	10.0w	e	10.0e	75.0
1951	d	30.0dw	5.0w	.....	a	d	20.0dw	1.0w	d	d	e	35.0w	e	44.0e	135.0
1952	d	35.0dw	10.0w	.....	a	d	40.0dw	5.0w	d	d	e	50.0w	e	60.0e	200.0
1953	d	40.0dw	15.0w	7.5	a	d	70.0dw	10.0w	d	d	e	70.7	e	36.8e	250.0
1954	27.2	19.2	51.0w	50.0	a	9.9	45.6	16.9	43.7	3.5	e	96.7	e	39.2e	382.9
1955	44.8	23.6	45.0w	65.4	a	21.7	69.7	28.9	83.2	8.1	e	160.2	e	54.3e	604.9
1956	60.0w	30.0w	60.0w	52.6	a	30.0w	70.0w	45.0w	100.0w	15.0w	e	189.7	e	97.7e	750.0
1957	80.0w	100.0w	77.0	58.1	e	35.0w	80.0w	50.0w	120.0w	20.0w	e	219.8	e	245.1e	1,000.0
1958	137.8	448.2	80.0w	60.9	21.8	50.0	85.0w	50.0w	152.8	30.0w	e	269.5	e	237.0e	1,485.2
1959	150.0w	500.0w	85.0w	60.3	37.0	50.0w	90.0w	55.0w	166.0w	30.0w	e	371.0	e	261.7e	1,700.0w

U. S. Frozen Food Market Data—Millions of Lbs.

Year	FRUITS: May 1 Carry In	FRUITS: Pack	FRUITS: Shipments	ORANGE CONCENTRATE: Nov. 1 Carry In	ORANGE CONCENTRATE: Pack	ORANGE CONCENTRATE: Shipments	VEGETABLES: June 1 Carry In	VEGETABLES: Pack	VEGETABLES: Shipments	FISH: May 1 Carry In	FISH: Pack	FISH: Shipments	EGGS: March 1 Carry In	EGGS: Pack	EGGS: Shipments
1941-42	82	207	187	----	1	1	44	111	105	42	247	234	45	237	208
1942-43	102	226	229	----	1	1	50	163	156	55	247	281	74	258	275
1943-44	99	255	223	----	4	4	57	237	195	21	246	215	57	413	371
1944-45	131	334	286	----	5	5	99	239	261	52	267	259	99	512	526
1945-46	169	432	332	----	9	9	77	308	240	60	286	271	85	398	365
1946-47	269	523	497	----	9	9	145	453	367	75	280	285	118	392	436
1947-48	295	349	422	----	32	32	231	348	419	70	247	249	74	371	324
1948-49	222	377	416	----	128	103	160	446	419	68	292	285	121	345	407
1949-50	181	351	381	25	256	201	187	564	530	75	286	283	59	318	304
1950-51	151	474	417	80	351	303	221	587	538	78	287	276	73	354	395
1951-52	208	416	432	128	480	466	270	770	738	89	326	302	32	339	310
1952-53	192	420	462	142	514	545	302	896	837	113	320	324	61	320	339
1953-54	150	542	482	111	670	608	361	1,103	1,030	109	275	275	42	343	344
1954-55	210	523	511	173	689	682	445	975	1,024	110	303	290	41	361	339
1955-56	222	660	626	180	745	696	396	1,140	1,121	123	315	315	63	342	363
1956-57	256	694	658	229	756	759	415	1,533	1,323	123	325	330	42	349	325
1957-58	292	671	666	226	589	677	625	1,367	1,457	118	314	331	66	334	340
1958-59	297	610	601	140	836	726	535	1,433	1,375	101	322	276	60	342	356
1959-60	306	618	652	250	800	800p	593	1,627	1,678	143	337	346	46	436	404
1960-61	272	a	a	a	a	a	542	a	a	134	a	a	78	a	a

a—Not available. d—Products combined as indicated. W—Partially estimated. p—Preliminary. e—Products combined as indicated. x—Includes fish frozen for bait, and for animal food.

U. S. Glassed Food Packs — Millions of Cases (principally 24/lb. or 24/pt.)

U. S. Pack

Year	Baby Food	Maraschino Cherry	CONDIMENTS Horseradish	Mustard	Meat Sauce	Spices	Extracts	Fruits	Honey	Juice	Meat Poultry	Olives, Green	Peanut Butter	PRESERVES Jams	Jelly	Butter	Marmalade*	Coffee, Soluble
1941	0.5	1.0	0.4	4.5	1.2	0.4	a	1.8	6.0	4.9	2.0	2.3	5.2	5.0	3.5	1.3	1.5	------
1942	1.5	0.9	0.4	4.0	1.2	0.4	a	8.0	6.0	6.8	2.0	2.4	5.8	7.5	4.5	1.5	2.5	------
1943	3.7	0.5	0.5	5.0	1.2	0.5	a	9.0	7.5	8.6	3.0	3.6	7.3	16.8	11.9	3.3	5.5	------
1944	6.8	0.8	0.6	4.0	3.2	0.6	a	9.5	7.5	9.0	5.0	3.8	9.1	19.1	12.5	5.2	5.2	------
1945	10.2	1.2	0.6	4.0	3.5	0.6	a	5.0	10.0	8.2	3.0	3.5	7.9	11.0	8.0	3.0	3.0	------
1946	12.9	1.7	0.6	5.0	3.0	0.8	1.5	4.5	9.0	11.8	4.1	3.6	9.5	12.5	10.0	4.2	2.9	------
1947	13.7	1.7	0.6	5.4	1.4	0.8	1.5	4.2	9.0	11.2	4.0	3.0	6.9	13.7	12.9	4.4	2.8	------
1948	18.0	1.6	0.5	5.0	1.5	0.7	1.6	3.0	8.0	10.0	3.5	2.9	6.7	11.5	9.8	2.4	1.1	------
1949	16.4	2.8	0.4	2.8	1.2	0.6	1.4	3.5	9.0	11.0	2.0	3.8	6.7	11.4	9.9	2.2	1.1	------
1950	19.4	1.2	0.5	6.4	1.5	0.7	1.6	3.0	10.0	13.0	4.0	3.3	6.8	11.8	12.1	3.0	1.1	------
1951	18.1	1.6	a	5.0	1.4	0.7	1.7	3.5	10.0	11.0	a	4.2	7.3	12.6	12.4	2.9	1.2	0.1w
1952	20.5	1.7	a	a	a	a	a	2.5	11.3	13.0	a	3.9	7.5	12.9	12.8	3.3	1.2	0.5w
1953	24.6	1.9	a	a	a	a	a	8.0	9.4	14.0	a	5.3	8.0	14.7	13.3	3.0	1.2	1.5w
1954	27.1	2.8	a	6.7	2.7	a	2.4	8.4	9.0	21.2	a	4.0	8.3	10.4	13.8	2.0	5.7	3.3
1955	26.0w	2.3	a	7.0w	3.0w	a	2.5w	8.4w	10.5	16.0	a	5.2	8.4	10.0	14.0	2.0	6.0	4.0w
1956	26.5w	1.3	a	7.0w	3.0w	0.8w	2.5w	8.5w	8.9	17.7	a	4.4	9.3	10.0w	14.0w	2.0w	6.0w	5.0w
1957	27.5w	2.3	a	7.5w	3.3w	0.8w	2.1w	8.0w	10.2	16.1	a	5.1	9.2	15.0w	14.0w	2.0w	5.0w	6.0w
1958	30.0w	1.9	a	6.8	5.3	0.9w	1.9	8.5w	11.1	18.9	a	6.0w	10.2	15.3	13.7	1.8	4.7	6.4
1959	32.3w	2.2w	a	7.2w	5.0w	1.0w	2.1w	7.9w	10.3	19.7	2.5w	6.5w	10.3	15.0w	14.0w	2.0w	4.0w	8.0w

U. S. Pack by Regions—Millions of Cases—1958

East	a	a	a	a	a	a	a	a	0.4	a	a	a	a	a	a	a	a	a
South	a	a	a	a	a	a	a	a	2.8	a	a	a	a	a	a	a	a	a
Midw.	a	a	a	a	a	a	a	a	4.2	a	a	a	a	a	a	a	a	a
West	a	a	a	a	a	a	a	a	3.7	a	a	a	a	a	a	a	a	a
TOTAL	30.0w	1.9	a	6.8	5.3	0.9w	1.9	8.5w	11.1	18.9	a	6.0	10.2	15.3	13.7	1.8	4.7	6.4

U. S. Pack by Regions—Millions of Cases—1959

East	a	a	a	a	a	a	a	a	0.7	a	a	a	a	a	a	a	a	a
South	a	a	a	a	a	a	a	a	2.4	a	a	a	a	a	a	a	a	a
Midw.	a	a	a	a	a	a	a	a	5.0	a	a	a	a	a	a	a	a	a
West	a	a	a	a	a	a	a	a	2.2	a	a	a	a	a	a	a	a	a
TOTAL	32.3w	2.2w	a	7.2w	5.0w	1.0w	2.1w	7.9w	10.3	19.7	2.5w	6.5w	10.3	15.0w	14.0w	2.0w	4.0w	8.0w

Year	PICKLES Cuke	Other	SALAD DRESSING Narrow Neck	Wide Mouth	Syrup	TOMATO PRODUCTS Catsup	Chili Sauce	Juice	Other	Vegetable Oils	VEGETABLES Seasonal	Non-seasonal	Vinegar	MISCELLANEOUS Narrow Neck	Wide Mouth	GRAND TOTAL Narrow Neck	Wide Mouth	Total
1941	13.7	a	1.0	15.8	1.8	10.9	2.6	0.9	0.7	2.0	3.0	2.1	5.0	----	13.0	31.0	63.0	114.0
1942	13.8	a	1.2	16.5	2.7	9.1	2.4	0.8	0.8	5.0	4.0	4.4	5.0	----	28.9	35.0	115.0	150.0
1943	11.4	a	1.0	16.0	9.3	6.8	4.0	0.4	0.7	5.8	5.8	8.3	4.0	1.2	25.4	43.0	145.0	188.0
1944	14.1	a	1.0	18.6	8.2	8.8	4.0	0.4	1.0	5.4	4.0	11.5	7.0	1.0	29.1	45.0	167.0	212.0
1945	14.7	a	1.1	16.1	13.0	10.0	2.4	0.5	0.7	5.9	4.9	14.8	1.4	6.3	48.5	53.0	170.0	223.0
1946	19.3	9.0w	1.2	18.1	12.5	14.0	3.6	0.7	0.2	5.2	2.7	14.6	5.6	3.7	27.0	63.0	172.0	235.0
1947	18.8	8.3	1.4	25.0	14.3	18.6	3.4	0.5	0.2	5.2	1.6	5.8	4.0	2.4	4.9	64.1	147.5	211.6
1948	19.6	8.4	1.7	27.1	7.2	15.1	2.4	0.5	0.2w	5.9	2.0	6.0	2.3	10.5	----	59.1	137.6	196.7
1949	19.3	4.0	1.8	27.9	7.2	9.5	1.2	0.9	0.2w	7.0w	2.7	5.0	6.5	5.1	1.0	53.0	132.5	185.5
1950	14.6	8.5	2.1	29.4	7.0	13.0	1.6	0.6	0.2w	6.0w	2.0	6.0	5.0	14.8	25.3	66.4	169.9	236.3
1951	26.8	8.0w	2.6	29.8	7.5	19.9	2.8	1.1	0.2w	7.0w	2.0	3.0	6.0	8.0	7.1	69.2	161.0	230.2
1952	32.2	8.5w	2.8	31.4	a	17.3	2.6	1.1	0.2w	a	2.5	3.0	5.5	29.0	17.0	71.5	173.5	245.0
1953	31.7	8.5w	3.1	32.1	a	16.9	2.2	1.0	0.1	a	2.5	3.0	5.5	32.9	24.9	75.7	190.0	265.7
1954	33.9	8.6	3.0	32.6	a	16.4	1.8	0.7	0.2w	a	3.0	5.8	a	28.1	13.9	76.5	198.9	275.4
1955	34.7	8.8w	3.5	33.7	a	19.3	2.1	0.7	0.2w	a	3.1	6.0	a	38.7	31.1	86.0	221.2	307.2
1956	36.0	8.8w	3.8	34.7	a	25.3	2.6	1.2	0.3w	a	3.5	5.5	a	33.2	33.2	89.6	225.4	315.0
1957	41.1	6.0w	4.2	36.5	a	21.2	1.6	1.2	0.3w	a	3.3	5.7	a	42.6	30.6	90.7	237.7	328.4
1958	39.7	2.0	4.4	37.6	a	24.9	1.5	e	0.3w	a	3.5	5.7	10.1	24.5	49.0	91.5	256.6	348.1
1959	37.3	4.7	5.3	39.5	14.6w	22.7	1.7	e	0.3w	8.8w	4.2w	6.0w	10.0w	21.4	48.0	96.3	264.9	361.2

U. S. Pack by Regions—Millions of Cases—1958

East	5.5	a	a	a	a	a	a	a	a	a	a	a	a	a	a	31.2	71.2	102.4
South	10.0	a	a	a	a	a	a	a	a	a	a	a	a	a	a	15.0	37.4	52.4
Midw.	17.6	a	a	a	a	a	a	a	a	a	a	a	a	a	a	24.7	92.6	117.3
West	6.6	a	a	a	a	11.4x	0.7x	a	a	a	a	a	a	a	a	20.2	51.4	71.6
TOTAL	39.7	2.0	4.4	37.6	a	24.9	1.5	e	0.3w	a	3.5	5.7	10.1	32.4	74.2d	91.1	252.6	343.7

U. S. Pack by Regions—Millions of Cases—1959

East	2.7	a	a	a	a	a	a	a	a	a	a	a	a	a	a	35.1	74.6	109.7
South	9.8	a	a	a	a	a	a	a	a	a	a	a	a	a	a	15.8	38.0	53.8
Midw.	19.4	a	a	a	a	a	a	a	a	a	a	a	a	a	a	26.1	100.5	126.6
West	5.4	a	a	a	a	8.9x	1.0x	a	a	a	a	a	a	a	a	19.3	51.8	71.1
TOTAL	37.3	4.7w	5.3	39.5	14.6w	22.7	1.7	e	0.3w	8.8w	4.2w	6.0w	10.0w	21.4	48.0	96.3	264.9	361.2

a—Data not available. d—Preserve packs included in Misc. Widemouth. w—Partially or wholly estimated. *Marmalade includes unclassified preserves. e—Tomato juice included with other juices. x—California pack only.

STATISTICS That You Can Depend On: The CANNER/PACKER Yearbook Number

The annual compilation of industry pack and marketing figures by CANNER/PACKER is intended to provide a ten-year history of most commodities which are canned, frozen, dried or glasspacked.

—See the index on Page 153

Statistics

U. S. and World Dried Fruit and Nut Packs and U. S. Foreign Trade (Thousands of Short Tons)

U. S. Pack by Years

Year	DRIED FRUITS										NUTS (Unshelled Basis)				
	Apples	Apricots	Dates	Figs	Peaches	Pears	Prunes	Raisins	Currants	TOTALS	Almonds	Brazils	Cashews	Filberts	Pecans	Walnuts	Total Nuts
1946	18.3	18.0	16.7	36.6	25.0	4.6	222.2	189.3	3.7	534.4	37.8	.....	.....	8.5	38.3	71.9	156.5
1947	15.0	15.2	10.2	38.0	17.1	2.6	200.2	301.3	4.5	604.1	29.2	.....	.....	8.8	59.3	64.6	161.9
1948	7.7	12.4	16.2	30.3	8.1	1.0	177.4	227.7	4.4	485.2	34.0	.....	.....	6.4	88.8	71.1	200.3
1949	14.5	14.2	14.1	27.8	14.3	2.2	161.2	255.6	3.6	507.5	43.3	.....	.....	11.1	64.1	88.1	206.6
1950	16.5	14.2	15.1	24.2	7.3	1.9	149.6	151.3	3.5	383.6	37.7	.....	.....	6.7	62.8	64.3	171.5
1951	10.0	7.4	18.8	29.3	9.3	1.5	180.2	238.9	3.3	498.7	42.7	.....	.....	6.9	77.4	77.7	204.7
1952	10.0	8.2	16.5	28.3	7.5	1.5	137.2	284.5	3.2	496.9	36.4	.....	.....	12.3	74.0	83.8	206.5
1953	8.5	16.0	17.0	24.4	8 6	1.1	150.9	228.6	3.6	458.9	38.6	.....	.....	4.9	105.8	59.2	208.5
1954	11.2	6.6	15.4	25.6	9.8	3.0	177.5	165.3	2.9	417.3	43.2	.....	.....	8.6	45.3	75.4	172.5
1955	11.9	14.3	25.3	25.4	7.0	2.3	135.3	222.5	3.1	447.1	38.3	.....	.....	7.7	73.4	77.4	196.8
1956	10.0	9.1	19.2	24.8	7.4	1.7	196.2	197.1	3.1	468.6	58.6	.....	.....	3.0	86.9	71.8	220.3
1957	13.7	7.7	23.3	22.7	7.8	1.9	167.9	162.7	3.6	411.3	37.5	.....	.....	12.5	70.7	66.6	187.3
1958	13.4	3.0	19.6	23.8	4.7	1.1	96.8	157.5	3.0	322.9	19.8	.....	.....	7.5	87.4	88.7	203.4
1959	13.0	8.0	22.9	19.0	8.0	1.8	145.3	216.8	3.5	438.3	82.0	.....	.....	9.4	63.8	61.2	216.4

U. S. Pack by Regions—1958

N.W.	7.7	.....	.....	.....	.....	.....	1.0	.....	.....	8.7	.....	.....	.....	7.5	.....	6.5	14.0
Calif.	5.3	3.0	19.6	23.3	4.7	1.1	95.8	157.5	3.0	313.8	19.8	.....	.....	.....	.....	82.2	102.0
Other	0.4	.....	.....	.....	.....	.....	.....	.....	.....	0.4	.....	.....	.....	.....	87.4	.....	87.4
U.S.	13.4	3.0	19.6	23.3	4.7	1.1	96.8	157.5	3.0	322.9	19.8	.....	.....	7.5	87.4	88.7	203.4

U. S. Pack by Regions—1959

N. W.	7.0	.....	.....	.....	.....	.....	5.5	.....	.....	12.5	.....	.....	.....	9.4	.....	4.2	13.6
Calif.	5.9	8.0	22.9	19.0	8.0	1.8	139.8	216.8	3.5	425.7	82.0	.....	.....	.....	.....	57.0	139.0
Other	0.1	.....	.....	.....	.....	.....	.....	.....	.....	0.1	.....	.....	.....	.....	63.8	.....	63.8
U. S.	13.0	8.0	22.9	19.0	8.0	1.8	145.3	216.8	3.5	438.3	82.0	.....	.....	9.4	63.8	61.2	216.4

Known World Packs (Date Figures are U. S. Pack Plus Exports of All Other Nations)

1946	22.9	31.0	304.0	204.2	31.5	7.9	253.5	396.0	82.8	1,333.8	168.2	27.6	75.6	164.5	38.4t	111.0	585.3
1947	20.2	26.5	358.2	239.9	22.8	5.5	236.7	459.8	102.8	1,472.4	170.1	30.5	26.9	112.2	59.3	122.5	521.5
1948	10.8	20.7	342.8	200.5	13.8	2.7	216.8	474.0	102.6	1,384.7	134.7	19.0	51.0	102.3	88.8	121.0	516.8
1949	17.3	24.6	236.7	196.9	20.1	3.1	212.5	463.8	122.9	1,297.9	155.5	35.4	38.9	159.3	64.1	153.9	607.1
1950	18.4	26.5	313.8	182.4	12.8	3.0	187.9	390.4	107.4	1,242.6	217.1	23.4	56.0	90.2	62.8	119.9	569.4
1951	12.2	22.5	449.9	175.0	12.5	2.3	225.7	458.1	109.5	1,461.8	196.0	34.3	67.2	143.5	77.4	128.9	614.6
1952	1 .1	19.3	356.3	159.5	10.0	2.2	157.4	534.8	102.3	1,400.6	233.0	18.9	63.3	100.1	74.0	146.0x	600.0
1953	11.4	26.5	354.6	189.3	14.0	2.1	226.4	536.7	108.5	1,469.5	227.0	33.2	59.4	115.9	105.8	105.9	647.2
1954	13.5	19.8	337.4	200.0	13.4	3.9	207.2	454.0	104.9	1,354.1	205.0	34.0w	65.0	174.9	a	126.0	505.9
1955	13.8	24.2	382.1	166.9	12.4	3.2	187.1	490.9	98.9	1,379.5	139.0	30.5w	77.0	126.7	a	149.3	415.0
1956	14.4	24.0	385.2	207.3	13.7	2.8	222.0	507.1	120.1	1,496.6	147.9	45.5	66.0	197.0	a	136.5	592.9
1957	14.7	25.2	339.7	187.9	10.6	2.8	211.3	463.7	110.9	1,366.8	265.1	42.0	77.0	155.5	a	99.7	639.3
1958	14.9	21.7	345.3	175.7x	9.9	2.0	144.0	458.6	111.4	1,283.5	146.2	43.5	73.0	169.0	a	174.2y	605.9
1959	14.0w	27.0w	350.0w	169.8x	13.0w	2.7w	212.2p	578.6p	106.8p	1,474.1	309.3	24.0	62.0	164.1	a	124.3y	883.7
1960	a	a	a	a	a	a	a	a	a		199.1p	35.0p	67.0p	146.3p	a	140.0p	587.4

U. S. Exports (Years Starting July 1 of Year Shown)—Nuts Shown Sheller Basis

1946	4.6	3.4	2.1	2.1	12.7	0.6	68.9	30.4	10.3f	135.1	0.6	.....	.....	0.2	0.3	1.2	2.3
1947	1.9	2.4	1.0	0.7	1.4	0.4	106.5	131.0	0.1f	245.4	0.4	.....	.....	0.5	0.2	1.1	2.2
1948	0.5	3.4	0.6	7.6	2.6	0.4	96.4	66.4	0.2f	178.1	0.1	.....	.....	0.2	0.6	0.6	1.5
1949	1.4	2.1	0.5	0.9	0.9	0.9	76.2	86.8	0.2f	169.8	0.2	.....	.....	0.2	0.5	0.9	1.8
1950	1.1	2.2	0.5	0.5	1.7	0.6	30.8	38.5	0.4f	76.3	0.1	.....	.....	0.3	0.3	2.8	3.5
1951	3.5	1.4	a	a	0.4	0.4	46.8	79.8	1.2f	133.5	0.5	.....	.....	0.4	0.4	0.6	1.9
1952	1.4	0.9	0.8	0.5	0.6	0.6	36.3	106.2	a	147.3	0.2	.....	.....	0.5	0.3	1.5	2.5
1953	0.7	2.8	0.6	0.6	0.4	0.6	42.3	59.4	3.2f	110.6	3.4	.....	.....	0.1	0.6	0.8	4.9
1954	1.3	1.7	0.9	0.7	0.8	0.5	38.3	41.9	2.5f	88.6	4.3	.....	.....	0.5	0.5	2.5	7.8
1955	3.5	1.8	0.7	0.7	0.7	0.8	36.8	76.1	3.8f	124.9	2.6	.....	.....	0.5	0.4	1.7	5.2
1956	1.0	2.1	1.0	0.7	0.8	0.8	56.0	60.9	3.4f	126.7	6.9	.....	.....	0.2	0.5	0.7	8.3
1957	8.7	2.4	1.2	0.7	1.7	1.1	61.1	30.7	4.2f	111.8	4.5	.....	.....	0.4	0.6	0.9	6.4
1958	2.5	0.4	2.2	0.8	0.5	0.4	31.4	22.4	2.6f	62.2	0.7	.....	.....	0.5	0.6	2.6	4.4

U. S. Imports (Years Starting July 1 of Year Shown)—Nuts shown Shelled Basis

1946	.....	.....	22.6	1.7	.....	.....	.....	1.1	.....	25.4	4.5	9.4	15.2	6.0	0.2	0.4	35.7
1947	.....	.....	9.9	1.5	.....	.....	.....	.....	.....	11.4	5.9	9.8	14.2	2.1	0.2	0.3	32.5
1948	.....	.....	17.3	1.4	.....	.....	.....	.....	.....	18.7	5.2	9.3	19.1	3.9	.....	1.3	38.8
1949	0.1	.....	14.9	2.4	.....	.....	.....	0.1	.....	17.5	0.7	9.7	19.7	3.3	0.2	3.2	36.8
1950	0.3	.....	25.0	4.9	.....	.....	.....	0.2	0.4	30.8	6.3	5.7	27.4	2.5	0.3	3.2	45.4
1951	.....	.....	20.8	4.8	.....	.....	.....	.....	0.1	25.7	1.8	8.5	20.6	3.5	.....	3.4	37.8
1952	.....	0.2	19.0	3.0	.....	.....	.....	0.1	0.1	22.4	3.4	2.8	22.5	2.6	0.1	3.4	34.8
1953	.....	.....	20.2	6.6	.....	.....	.....	0.1	.....	26.9	2.3	8.5	24.2	2.8	0.1	3.8	41.7
1954	.....	.....	22.1	6.4	.....	.....	.....	.....	.....	28.5	2.2	6.0	33.4	3.5	0.2	4.0	43.9
1955	.....	.....	20.5	8.5	.....	.....	.....	.....	0.1	29.1	0.2	10.3	.....	.....	.....	.....	.....
1956	.....	.....	22.1	8.0	.....	.....	.....	.....	.....	30.1	1.0	9.2	24.6	2.9	0.1	2.1	39.9
1957	.....	.....	21.3	5.7	.....	.....	.....	.....	.....	27.0	2.4	9.8	24.8	2.6	0.2	1.7	51.5
1958	.....	.....	17.9	10.6	.....	.....	.....	0.5	1.6	30.6	6.1	9.7	31.2	3.5	0.2	1.7	52.4

a—Not available. f—Fruit salad exports. p—Preliminary figures, 11 months only. t—U. S. pecan pack included in totals. w—Partially or wholly estimated. x—Excludes Bulgaria, Hungary, Rumania.

Don't Lose This Issue:

The statistics contained on these pages are compiled once a year by Canner/Packer. The supply of this issue is limited—and expensive for replacement. To insure that this compilation—the most complete figures published—is on hand when you need it, the Canner/Packer staff urges:

Don't Lose This Issue

U. S. Packs of Dry Food Products —Thousands of Short Tons of 2,000 lbs.

Year	BEVERAGES, IMPORTS			MFD. CEREALS			CHIPS		CORN PRODUCT (SALES)			EGGS	FRUIT PRODUCTS		
	Cocoa	Coffee	Tea	Breakfast Foods	Prepared Flour Mixes	Other	Corn	Potato	Dry Sweeteners	Starch	Dextrins		Candied Fruit & Peel	Dried Fruits	Fruit Powders, Granules
1941	346	1,127	a	a	a	a	a	a	329	765	73	23	a	489	a
1942	120	857	a	a	a	a	a	a	385	773	67	118	a	536	a
1943	287	1,100	45	a	a	a	a	a	361	765	94	131	a	700	a
1944	341	1,303	45	a	a	a	a	a	342	620	85	160	a	596	a
1945	310	1,358	42	a	a	a	a	a	333	618	74	53	a	567	a
1946	297	1,365	47	a	a	a	a	a	324	641	70	63	a	534	a
1947	299	1,248	34	743	635	a	9	78	393	755	81	43	a	604	a
1948	273	1,386	46	a	a	a	a	90w	356	694	79	22	a	485	a
1949	314	1,459	47	a	a	a	a	100w	369	750	79	38	a	508	a
1950	330	1,219	57	a	a	a	a	110w	414	895	103	47	a	384	a
															a
1951	303	1,344	a	a	a	a	a	120w	384	830	94	9	a	499	a
1952	286	1,340	a	a	a	a	a	130w	374	840	85	9	a	497	a
1953	283	1,393	a	a	a	a	a	140w	392	916	91	10	a	459	a
1954	258	1,131	a	789	888	a	19	149	373	953	84	11	a	417	a
1955	250	1.299	52	a	a	a	a	165w	366	1,023	97	12	a	447	a
1956	279	1,406	50	a	a	a	a	182	379	1,031	94	11	a	469	a
1957	255	1,381	51	a	a	a	a	217	372	1,022	87	14	a	411	a
1958	221	1,334	52	833	943	a	33	212	417	997	80	13	a	323	a
1959	242	1,537	55	a	a	a	a	230w	a	a	a	27	a	438	a

Year	LEAVENINGS		MACARONI PRODUCTS			MILK PRODUCTS					NUTS			SPICES	
	Baking Powder	Dry Yeast	Macaroni, Spaghetti	Noodles	Other	Whole	Nonfat	Buttermilk	Malted	Ice Cream Mix	Tree Nuts Crop	Peanuts Crop	U.S. Imports (c)	U.S. Crop: Mustard	U.S. Imports: All
1941	a	a	a	a	a	23	183	38	12	a	143	738	103	37	81
1942	a	a	a	a	a	31	283	35	17	a	128	1,096	32	22	29
1943	a	a	a	a	a	69	255	30	25	a	155	1,088	39	17	16
1944	a	a	a	a	a	89	291	28	20	a	174	1,040	91	15	19
1945	a	a	a	a	a	109	321	25	21	a	174	1,021	120	13	30
1946	a	a	a	a	a	94	327	19	23	a	157	1,019	126	18	42
1947	55	158	346	63	a	82	339	23	19	a	162	1,091	123	10	47
1948	a	a	a	a	a	85	341	21	16	a	200	1,168	147	10	47
1949	a	a	a	a	a	63	467	25	13	a	207	934	143	6	46
1950	a	a	a	a	a	62	441	24	15	a	172	1,018	186	9	58
1951	a	a	a	a	a	66	351	25	17	a	205	839	146	10	a
1952	a	a	a	a	a	51	432	26	15	a	207	678	156	8	a
1953	a	a	a	a	a	52	607	29	16	a	209	787	163	4	a
1954	79	160	367	71	a	47	701	28	16	a	173	504	196	5	a
1955	a	a	a	a	a	55	702	29	17	2	197	788	200	16	a
1956	a	a	a	a	a	58	774	32	16	2	220	783	155	18	78
1957	a	a	a	a	a	55	839	35	17	2	187	718	115	6	53
1958	a	a	398	71	a	47	854	39	a	a	208	918	113	10	62
1959	a	a	a	a	a	48	861	37	a	a	216	801	125w	12w	65w

Year	SUGAR DELIVERIES*				VEGETABLES						MISCELLANEOUS PRODUCTS				GRAND TOTAL
	Cane Refineries	Beet Factories	Importers	Mainland Cane Mills	Beans	Peas	Potato	Soup Mixes	Dehy. Vegs.	All Other	Puddings, dry	Flavor pasts, powder	Pectin	Pet Foods	
1941	5,191	1,825	527	90	855	173	1	a	6	a	a	a	a	a	a
1942	3,219	1,592	436	70	878	338	10	a	17	a	a	a	a	a	a
1943	4,346	1,426	482	116	972	501	36	a	27	a	a	a	a	a	a
1944	5,249	1,081	489	154	752	401	66	a	38	a	a	a	a	a	a
1945	4,392	975	429	92	588	268	38	a	27	a	a	a	a	a	a
1946	3,749	1,289	449	139	735	304	10	a	17	a	a	a	a	a	a
1947	5,091	1,472	498	108	791	290	18	a	7	a	146	14	5	340	16,220
1948	4,815	1,548	478	91	969	285	83	a	7	a	a	a	a	a	a
1949	5,127	1,390	481	126	993	146	25	a	9	a	a	a	a	a	a
1950	5,541	1,634	518	98	756	154	20	a	10	a	a	a	a	a	a
1951	5,119	1,618	459	110	791	177	10	a	12	a	a	a	a	a	a
1952	5,480	1,457	545	114	746	123	5	a	13	a	a	a	a	a	a
1953	5,659	1,637	542	117	825	153	5	a	16	a	a	a	a	a	a
1954	5,370	1,687	529	111	847	155	5	a	18	a	191	32	4	474	16,859
1955	5,655	1,686	527	36	832	126	10	a	17	a	a	a	a	a	17,900w
1956	5,955	1,852	555	88	856	233	23	a	20	a	a	a	a	a	18,900w
1957	5,682	1,932	533	55	781	166	27	a	19	a	a	a	a	a	18,440w
1958	5,786	2,082	546	48	959	125	43	a	21	a	216	33	5	779	19,075
1959	5,901	2,065	572	42	911	219	60	a	30	a	a	a	a	a	19,68w

*U.S. deliveries by primary distributors, calendar years, refined equivalent. a—Not available. c—Nut imports on basis of years starting July 1 of year shown. p—Preliminary. w—Estimated.

STATISTICS That You Can Depend On: The CANNER/PACKER Yearbook Number

The annual compilation of industry pack and marketing figures by CANNER/PACKER is intended to provide a ten-year history of most commodities which are canned, frozen, dried or glasspacked.

—See the index on Page 153

U.S. Brined Cherry Packs (including SO_2 solution)—Thousands of 250-lb. Bbls.

Year	— NORTHWEST —			— CALIFORNIA —			MONTANA	UTAH	ILLINOIS	MICHIGAN	NEW YORK	OHIO	PENNA.	WISCONSIN	OTHER	TOTAL U. S.
	Royal Anns	Other	Total	Royal Anns	Other	Total										
1946	98.3	59.3	157.6	46.8	13.1	59.9	...	...	...	19.6	3.0	...	0.9	3.9	...	244.9
1947	39.3	63.0	102.3	51.6	20.9	72.5	...	...	...	22.4	5.8	2.8	0.6	1.6	...	208.0
1948	44.7	54.7	99.4	56.1	37.1	93.2	...	0.6	...	23.8	16.5	...	...	11.4	...	244.9
1949	107.1	52.4	159.5	69.8	51.1	120.9	...	2.6	4.2	37.0	14.8	2.5	2.8	2.2	...	346.5
1950	86.8	31.8	118.6	41.4	20.4	61.8	...	2.5	...	39.2	26.0	6.4	4.0	3.2	...	261.7
1951	45.1	26.1	71.2	39.3	15.3	54.6	...	0.8	...	36.0	40.0	...	6.7	3.2	...	212.5
1952	51.5	19.3	70.8	55.1	42.3	97.4	...	...	...	35.6	18.8	...	3.2	3.1	...	228.9
1953	90.7	46.4	137.1	40.5	17.8	58.3	...	...	...	47.2	16.8	2.0	0.3	4.3	...	266.0
1954	144.2	41.2	185.4	33.4	31.3	64.7	...	0.3	...	50.0	45.2	...	3.2	7.7	...	356.5
1955	111.2	41.8	153.0	46.7	32.2	78.9	...	3.5	...	34.4	45.0	...	3.1	5.2	...	322.1
1956	52.1	18.1	70.2	67.1	26.7	93.8	...	1.7	...	40.8	5.8	...	1.0	1.7	...	214.5
1957	54.8	21.1	75.9	a	a	110.7	0.8	7.9	...	89.2	30.6	...	2.9	0.9	...	318.8
1958	92.6	60.5	153.1	15.1	16.3	31.4	0.9	18.3	...	66.8	47.1	...	3.3	...	...	321.0
1959	83.6	53.6	137.2	24.1	17.2	41.3	0.1	4.3	...	78.8	50.2	...	1.7	...	...	313.6

Sources of Statistical Data

RAW PRODUCTS: Acreage, crop, grower prices from U.S. Dept. of Agriculture and cooperating state agricultural departments. Utilization data largely from USDA, but some converted by Canner/Packer from pack figures.

CANNED FRUITS & VEGETABLES: Largely compiled from records of Natl. Canners Assn., Florida Canners Assn., Canners League of California, Utah Canners Assn., New York State Canners & Freezers Assn., Northwest Canners & Freezers Assn., Pineapple Growers Assn. of Hawaii, U.S. Dept. of Commerce, and reports of individual canners. Some non-seasonal canned vegetable packs are trade estimates.

CANNED & BOTTLED JUICES: Citrus from Natl. Canners Assn., Florida Canners Assn., U.S. Depts. of Agriculture and Commerce, Lemon Products Advisory Bd., reports of individual canners. Apple and tomato from Natl. Canners Assn. Pineapple from Pineapple Growers Assn. Grape developed from crop figures, prune from shipment data compiled by Prune Advisory Bd. Others are U.S. Census data for 1947 and 1954, trade estimates for other years.

OTHER CANNED FOODS: Ades and punches—trade estimates based on reported consumption. Baby foods—Natl. Canners Assn. through 1956; estimates thereafter. Coffee—converted from USDC can shipment figures. Fish—U.S. Fish & Wildlife Service. Meats—U.S. Dept. of Commerce and Natl. Canners Assn. through 1944; U.S. Dept. of Agriculture inspected tonnage, converted from lbs., thereafter. Pet foods—fish from U.S. Fish & Wildlife Service; other converted from USDC can shipment figures. Poultry—USDA inspected tonnage, converted from lbs. Shortening and lard—converted from USDC can shipment figures. Spaghetti—with meat, from USDA inspected tonnage figures; other from Census reports, plus trade estimates. All other: U.S. Census data for 1947 and 1954; trade estimates.

DRIED FRUITS & VEGETABLES: Northwest figures and California dates from U.S. Dept. of Agriculture. California packs from Dried Fruit Assn. of California. World dried fruit except dates from U.S. Dept. of Agriculture. World dates—exports of leading nations, as reported by Commonwealth Economic Committee, London, plus U.S. production from USDA. U.S. dried fruit exports-imports from U.S. Dept. of Commerce. Bean, pea packs from USDA. Peppers from Calif. Dept. of Agriculture. Dehydrated vegetables—U.S. Dept. of Commerce through 1945, estimates thereafter.

NUTS: Crop data from USDA. Exports-imports from USDC.

OTHER DRY FOODS: Cereal products from U.S. Census Bureau. Coffee-tea-cocoa imports from U.S. Dept. of Commerce. Eggs from U.S. Dept. of Agriculture. Milk from USDA. Pet foods from U.S. Census Bureau.

FROZEN FRUITS & VEGETABLES: From Natl. Assn. of Frozen Food Packers, Western Frozen Food Processors Assn., Northwest Canners & Freezers Assn., Michigan State University, New York State Canners & Freezers Assn., Utah Canners Assn., and from reports of individual processors.

FROZEN JUICES & CONCENTRATES: From Florida Canners Assn., U.S. Dept. of Agriculture, Lemon Prods. Advisory Bd., U.S. Dept. of Commerce, and from reports of individual packers.

OTHER FROZEN FOODS: Convenience or prepared foods—potato from Natl. Assn. of Frozen Food Packers; other from U.S. Dept. of Agriculture for 1955 and 1956, from reports of individual packers and from trade estimates in other years before and after. Eggs from USDA. Meats and poultry from trade estimates. Seafoods from U.S. Fish & Wildlife Service.

GLASSED FOODS: Total U.S. pack—U.S. Dept. of Commerce food glass container shipments, converted on basis two dozen per case. Baby foods—USDC for early years, Natl. Canners Assn. 1946-1956, trade estimates thereafter. Maraschino cherries—U.S. Census figures for 1947 and 1954; developed from brined cherry pack and import data in other years. Condiments—based partially on import figures, partially on trade estimates. Fruits—Census data plus trade estimates.
Honey—converted from U.S. Dept. of Agriculture honey crop reports. Juices—USDC and Natl. Canners Assn. data, plus figures developed from crop data and trade estimates. Meat and poultry from trade estimates. Olives (green) from Calif. crop and U.S. imports, plus Census figures for 1947 and 1954. Peanut butter converted from USDA figures on peanuts utilized for manufacture. Pickles—cucumber from crop data by USDA; other from Census figures for 1947 and 1954, trade estimates in other years. Salad dressings from USDC. Catsup and other tomato products—largely from Natl. Canners Assn., plus Census data, Canners League of Calif., Utah Canners Assn., New York Canners & Freezers Assn. Vegetable oils—figures based on arbitrary proportion of total edible vegetable oil output reported by USDA and export-import data from USDC. Vegetables—USDC and Natl. Canners Assn., supplemented by trade sources; bean figures through 1945 from *The Glass Packer*. Vinegar—developed from USDA apple crop utilization data. Syrups—developed from Census data, USDA total syrup production figures, trade estimates. Preserves—through 1946 estimated from reports of USDC and War Food Administration; 1947 from U.S. Census Bureau; 1948-56 from USDC; trade estimates thereafter. Extracts—1947 and 1954 from Census Bureau, others trade estimates. Soluble Coffee—1947 and 1954 from Census Bureau, others trade estimates.

BRINED CHERRIES: Compiled by N.W. Cherry Briners Assn. from reports of Canners League of Calif., Michigan State University, New York State Canners & Freezers Assn., and from reports of individual packers.

From Field to Freezer On Our Own Farms

Packers for leading national brands since 1946

Blue Lake Beans
Golden Cut Corn
Northwest Strawberries

Alderman Farms Frozen Foods

Dayton, Oregon **Phone 24 - Dayton**

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WESTFIELD TREATS

12 different and delightful fruit juice drinks

WESTFIELD CONCORD GRAPE JUICE

Packed in the grape juice capital of the world

WESTFIELD MARASCHINO CHERRIES

Richly colored and deliciously flavored

PACKED BY

WESTFIELD FOOD PRODUCTS, INC.

WESTFIELD, NEW YORK

. . . IF YOU USE POTATOES

FOR ANY RECIPE REQUIRING DICED POTATOES

Made from the genuine Idaho Russet for consistently excellent flavor, quality controlled for color, texture, uniformity. Available in institutional packs or bulk for ingredient use—full size range.

WITH THE FLAVOR and TEXTURE of the Genuine IDAHO RUSSET

DELICIOUS MASHED POTATOES in 50 Seconds

Rogers has already mashed 'em for you! 84 - 3 ounce servings, only 2¢ each from a #10 can. Superb Idaho Russet texture and flavor every time. Packed 6/10 case; 10 and 40 lb. bags.

PHONE, WIRE, WRITE for COMPLETE DETAILS, INFORMATION, SAMPLES.

Rogers Brothers Company

FOOD PRODUCTS DIVISION
IDAHO FALLS, IDAHO

"NOTHING BUT THE BEST"

TOP QUALITY CANNED PEAS

From the Meadows
of Eastern Oregon

also

Mixed Fresh Green Peas and Freshly Pulled Diced Carrots

Buyers' or Packer's Label

Rogers Canning Company

Milton-Freewater and Athena, Oregon

Picked and Packed with FIELD-CRISP FRESHNESS . . .

RETAIL & INSTITUTIONAL
BUYERS LABELS AVAILABLE ON

Strawberries
Peas
Corn
Mixed Vegetables
Peas & Carrots
Succotash
Cream Style Corn

Complete 2-lb. bag line

Our new modern plant insures fast-handling of fresh products—necessary for the highest quality pack. We use the U.S.D.A. continuous inspection shield.

TWIN CITY FOODS, INC.

STANWOOD, WASHINGTON

RAW PRODUCTS: Processing Dates for Fruits and Berries in the United States

States and Territories	Apples	Apricots	BERRIES							Cherries	Grapes	Grapefruit	Lemons	Olives	Oranges	Peaches	Pears	Plums
			Black	Blue	Cran	Goose	Logan	Rasp	Straw									
Alabama									May 1 June 15							June 5 Aug. 1		
Arizona												Nov. 1 May 1						
Arkansas	Aug. 15 Dec. 31		June 1 July 15								Aug. 15 Oct. 1					July 10 Sept. 1		
California	Aug. 1 Mar. 15	June 5 Aug. 15					June 1 July 1	June 15 July 15	Mar. 1 Oct. 15	May 10 July 10	Aug. 15 Oct. 1	Jan. 1 July 1	All Year	Oct. 1 Mar. 15	June 1 Nov. 15	July 10 Sept. 20	July 15 Oct. 15	July 15 Sept. 30
Colorado	Oct. 15 Dec. 15	July 10 Aug. 1								June 15 July 15						Aug. 25 Sept. 25	Sept. 15 Oct. 20	
Delaware																Aug. 1 Sept. 30		
Florida									Jan. 15 June 15			Oct. 15 June 15			Oct. 15 June 20			
Georgia																June 15 Aug. 10		
Hawaii																		
Idaho	Sept. 15 Dec. 31									July 1 Aug. 10						Aug. 15 Sept. 15		
Kansas	Aug. 1 Nov. 30																	
Louisiana			June 1 July 31						May 1 June 15									
Maine				July 25 Sept. 15					June 5 June 25									
Maryland	Sept. 1 Dec. 10			June 10 Aug. 20				July 1 July 20										
Massachusetts					Sept. 1 Dec. 31													
Michigan	Aug. 1 Nov. 30		July 25 Aug. 10			July 20 Aug. 20		July 5 July 20	June 10 July 10	July 1 Aug. 15	Sept. 1 Oct. 30					Sept. 1 Oct. 15	Sept. 1 Nov. 30	Aug. 1 Aug. 30
Mississippi			June 1 July 31															
Missouri	Aug. 15 Dec. 1		June 20 Aug. 1								Aug. 25 Oct. 15					July 25 Sept. 1		
Montana										July 14 Aug. 15								
New Jersey				June 20 Aug. 20	Sept. 1 Dec. 31			July 14 Aug. 15								Aug. 1 Sept. 15	Sept. 20 Nov. 15	
New York	Sept. 15 Dec. 31	Aug. 1 Aug. 15						July 5 Aug. 1	June 10 June 25	June 25 Aug. 15	Sept. 10 Nov. 1					Aug. 20 Sept. 30	Sept. 10 Nov. 15	Aug. 15 Sept. 30
North Carolina																July 25 Aug. 30		
Ohio	Sept. 15 Dec. 31									July 5 Aug. 15	Sept. 1 Oct. 15							
Oklahoma	Aug. 15 Oct. 15		June 1 July 1															
Oregon	Sept. 15 Dec. 31	Aug. 15 Sept. 15	Aug. 1 Oct. 10			May 15 June 15	June 20 Aug. 1	June 25 Aug. 1	May 20 June 25	June 20 July 31						Aug. 15 Oct. 1	Aug. 10 Nov. 1	Aug. 15 Sept. 30
Pennsylvania	Sept. 1 Jan. 31							July 1 July 30		June 30 July 31	Sept. 20 Nov. 1					Aug. 15 Sept. 20		
Puerto Rico												Nov. 15 April 30						
South Carolina																July 15 Aug. 20		
Texas			June 10 July 31									Dec. 1 May 1				June 10 Aug. 1		
Utah	Oct. 15 Dec. 15	July 10 Aug. 1						July 1 July 20	June 15 July 15	June 15 July 15						Aug. 25 Sept. 25	Sept. 15 Oct. 20	
Virginia	Aug. 10 Dec. 31								May 15 June 5									
Washington	Sept. 15 Dec. 31	Aug. 25 Sept. 20	Aug. 15 Sept. 15	July 15 Aug. 15		May 15 June 15	June 25 Aug. 1	July 1 Aug. 1	June 1 July 1	June 25 July 31						Aug. 15 Sept. 20	Aug. 10 Nov. 1	Aug. 15 Sept. 30
West Virginia	Aug. 10 Jan. 31																	
Wisconsin				June 10 Aug. 30	Oct. 1 Nov. 20	June 25 Aug. 1			June 10 July 20	June 25 Aug. 20								
Ontario, Canada	Sept. 15 Dec. 31		Aug. 1 Sept. 1					July 10 Aug. 17	June 14 July 17	July 1 Aug. 10						Sept. 1 Oct. 5	Sept. 15 Dec. 15	Sept. 15 Oct. 7

—American Can Co., National Canners Assn., University of Tennessee, U.S. Department of Agriculture

Reference Data

RAW PRODUCTS: Processing Season for Vegetables in the United States

States and Territories	Asparagus	BEANS		Beets	Corn	Carrots	Okra	Peas	Fresh Pack Pickles	Pimientos	Pumpkin	Spinach	Squash	Sweet Potatoes	Tomatoes
		Lima	Snap												
Alabama			May 1 Sept. 15				May 15 Sept. 30		May 15 June 30	July 15 Nov. 5				Sept. 15 Feb. 1	July 10 Sept. 30
Arkansas		July 25 Oct. 25	May 15-July 31 Sept. 10-Oct. 31		July 1 July 20			May 15 May 25				Mar. 15-May 15 Nov. 10-Dec. 31			
California	April 10 June 30	Sept. 1 Oct. 31	July 1 Sept. 30	June 20 Dec. 10		May 1 July 30		April 10 June 30	July 1 Aug. 31		Oct. 1 Nov. 15	Mar. 10-May 10 Oct. 1 -Dec. 31	Nov. 15 Jan. 10	Sept. 15 Nov. 30	Aug. 1 Nov. 30
Colorado		Sept. 5 Sept. 30	July 15 Sept. 15	Oct. 15 Oct. 20	Aug. 20 Sept. 20			April 10 June 30	July 15 Oct. 5		Oct. 5 Nov. 15		Oct. 1 Nov. 15		Aug. 10 Oct. 25
Delaware	April 25 June 30	Aug. 5 Oct. 15	June 15 Sept. 30		July 20 Sept. 15			May 20 July 31	June 15 Aug. 15		Oct. 1 Nov. 15		Oct. 1 Nov. 5	Sept. 15 Nov. 10	Aug. 1 Sept. 25
Florida			Oct. 15-Dec. 15 Jan. 1 -May 15											Sept. 15 Feb. 1	Nov. 15 June 15
Georgia			May 10-June 30 July 10-Oct. 20				May 15 Sept. 1		May 5 June 30	July 15 Nov. 15				Oct. 1 Jan. 15	
Idaho	April 10 June 30	Aug. 15 Sept. 30	July 20 Sept. 10		Aug. 15 Sept. 25			June 1 Aug. 5							Aug. 20 Oct. 15
Illinois	April 20 July 10	Aug. 20 Sept. 30	July 15 Aug. 15	July 15 Nov. 30	Aug. 10 Oct. 1			June 5 July 25	June 20 Sept. 30		Sept. 15 Oct. 30				Aug. 1 Oct. 10
Indiana	April 20 July 5	Aug. 15 Oct. 15	July 10 Sept. 15	Sept. 15 Oct. 15	Aug. 1 Sept. 25			June 5 July 10	July 10 Sept. 20		Sept. 15 Nov. 15	May 15-June 15 Oct. 1 -Oct. 25			July 25 Oct. 20
Iowa	April 25 June 20				Aug. 5 Sept. 30			June 1 July 15	July 1 Sept. 30		Sept. 15 Oct. 30				Aug. 1 Oct. 10
Kentucky		Aug. 15 Sept. 30			July 25 Aug. 30			May 15 June 15	July 1 July 31		Sept. 15 Nov. 15	April 25-June 1 Sept. 15-Oct. 10		Sept. 25 Oct. 25	Aug. 1 Oct. 20
Louisiana			May 1 -July 15 Oct. 1 -Nov. 15	Dec. 15 Feb. 28			May 1 Sept. 1		May 15 July 15	Oct. 1 Dec. 1				Oct. 1 Feb. 1	June 1 Aug. 15
Maine			July 25 Aug. 25		Sept. 1 Sept. 30			July 15 Aug. 31	July 25 Sept. 15						
Maryland	April 20 June 30	Aug. 5 Oct. 15	June 15 Oct. 15	June 20 Aug. 15	July 20 Sept. 30			May 25 July 5	June 15 Aug. 15		Oct. 1 Nov. 1	April 1 -June 15 Oct. 15-Nov. 30	Oct. 1 Nov. 10	Sept. 10 Nov. 1	July 15 Oct. 15
Michigan	April 25 July 10	Aug. 25 Oct. 10	July 20 Sept. 30	Aug. 10 Nov. 30	Aug. 25 Sept. 25	Oct. 1 Nov. 25		June 20 July 20	July 15 Sept. 30		Sept. 10 Oct. 30	May 10-July 1 Sept. 20-Oct. 20	Sept. 5 Sept. 30		Aug. 10 Oct. 10
Minnesota	May 5 July 5	Aug. 15 Sept. 30	July 15 Aug. 31	July 20 Nov. 30	Aug. 10 Sept. 30			June 10 July 25	July 20 Sept. 30		Sept. 10 Oct. 30				
Mississippi			May 10-June 20 Sept. 25-Nov. 5				May 1 Sept. 1	June 1 July 15	May 15 June 30						June 15 July 15
Missouri		July 25 Oct. 25	June 15 Oct. 15		Aug. 1 Aug. 31			May 15 July 15	June 10 Sept. 30			May 1 June 15			
Montana					Aug. 25 Sept. 25			June 25 Aug. 25							
Nebraska			Aug. 10 Sept. 10		Aug. 15 Sept. 30			June 1 July 15			Oct. 1 Dec. 1				Aug. 10 Oct. 1
New Hampshire			July 25 Aug. 25		Sept. 1 Sept. 30				July 15 Sept. 15						
New Jersey	April 20 July 5	Aug. 1 Oct. 1	July 1 Sept. 30	July 1 July 25	July 25 Aug. 25			June 1 July 5	July 1 Aug. 10		Oct. 1 Nov. 1	June 5 -June 25 Oct. 1 -Nov. 20	Oct. 1 Nov. 15	Sept. 15 Nov. 15	July 25 Oct. 10
New Mexico			July 1 Sept. 30												
New York		Sept. 1 Oct. 20	July 10 Oct. 20	Aug. 1 Nov. 30	Aug. 25 Oct. 15	Sept. 10 Oct. 30		June 20 Aug. 5	Aug. 1 Sept. 30		Sept. 15 Nov. 1		Sept. 15 Nov. 1		Aug. 15 Oct. 15
North Carolina			July 1 Sept. 25						June 1 July 25	July 25 Oct. 15					July 15 Sept. 15
Ohio	April 25 July 5	Sept. 1 Oct. 10	July 15 Aug. 15	Aug. 1 Nov. 15	Aug. 1 Sept. 30			June 5 July 15	July 15 Sept. 25		Sept. 10 Nov. 20				Aug. 5 Oct. 15
Oklahoma			June 1 July 15		June 25 July 20			May 15 May 31	July 10 Oct. 31			Mar. 15-May 15 Nov. 1 -Dec. 31			July 1 Sept. 30
Oregon	April 10 June 30		July 10 Sept. 30	July 10 Nov. 30	Aug. 15 Sept. 30	Aug. 20 Oct. 15		May 15 July 31	July 10 Oct. 31		Oct. 1 Nov. 30	Sept. 1 Oct. 15	Oct. 10 Nov. 10		Aug. 15 Sept. 30
Pennsylvania	April 25 July 5	Aug. 1 Oct. 15	July 1 Sept. 20	July 20 Nov. 30	Aug. 1 Oct. 15	Sept. 15 Nov. 30		June 5 Aug. 5	Aug. 1 Sept. 25		Sept. 25 Nov. 15				Aug. 1 Oct. 20
South Carolina	April 15 June 1		May 10-June 30 Sept. 25-Nov. 15						May 20 July 5	July 20 Oct. 31					June 30 Aug. 15
South Dakota					Aug. 15 Sept. 25										
Tennessee		July 25 Sept. 30	July 1 Oct. 15	July 1 July 25	Aug. 5 Sept. 5			May 15 May 25		Aug. 1 Oct. 20	Sept. 15 Nov. 15	April 25-June 1 Sept. 15-Oct. 10		Oct. 1 Nov. 30	July 20 Oct. 15
Texas			Mar. 15-July 20 Oct. 15-Dec. 31	Nov. 15 May 15	June 20 July 15	Nov. 15 May 15			May 20 July 31			Nov. 25 Mar. 31		Oct. 1 Feb. 1	May 15-July 31 Dec. 1 -Jan. 15
Utah	May 20 June 5	Sept. 1 Oct. 15	July 15 Oct. 15	July 1 Aug. 31	Aug. 15 Sept. 25	Aug. 10 Oct. 15		June 10 Aug. 10	July 15 Sept. 30		Oct. 1 Nov. 15		Oct. 1 Nov. 15		Aug. 15 Oct. 15
Vermont			July 25 Aug. 31												

Diana

Cherries in Brine
Maraschino Cherries
Glace Cherries
Cherries for
Fruit Cocktail

•

DIANA FRUIT PRESERVING CO., INC.

Quality packers since 1921

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Frozen Vegetables

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GRESHAM, OREGON

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If you need a complete
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(Retail or Institutional)
we can serve you with consistent
high quality and continuity under our
reputable MITY FRESH label.

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WATSONVILLE CANNING & FROZEN FOODS COMPANY

331 Ford Street, P. O. Box 990
Watsonville, California

Highest Quality

CALIFORNIA CHILE PRODUCTS

Green Chiles • Pimientos •
Green Chile Salsa (sauce) •
Snap-E-Tom tomato drink • Tomatoes & Green Chile

COASTAL VALLEY CANNING CO.

Specialists in packs for private label buyers

Oxnard, Calif.

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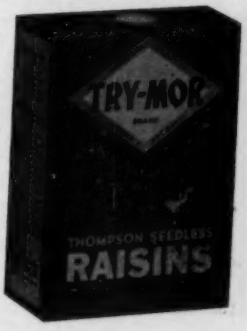

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•

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4466 No. Dower Ave.
FRESNO 5, CALIF.

We'll Pack Your Label Extra Fast!

FROZEN PEAS
shelled, processed and
frozen at the plant in
30 minutes!

FROZEN CORN, PEAS & CARROTS
EVERGREEN Label for
institutional sizes.

Packed under continuous inspection of the U. S. Dept. of Agriculture

Evergreen Frozen Foods Co.

Snohomish, Wash. Logan 8-4161

Reference Data

RAW PRODUCTS: Processing Season for Vegetables (Continued)

States and Territories	Asparagus	BEANS		Beets	Corn	Carrots	Okra	Peas	Fresh Pack Pickles	Pimientos	Pumpkin	Spinach	Squash	Sweet Potatoes	Tomatoes
		Lima	Snap												
Virginia	May 1 June 10	Aug. 1 Oct. 31	June 15 Oct. 31		July 15 Aug. 31			May 10 June 10	June 25 Aug. 25			Mar. 15-May 15 Nov. 15-Feb. 20		Sept. 15 Nov. 15	July 15 Sept. 15
Washington	April 10 July 1	Sept. 1 Oct. 15	July 1 Sept. 20	Aug. 1 Oct. 5	July 20 Oct. 20	July 25 Nov. 20		June 1 Aug. 31	July 1 Sept. 30		Oct. 1 Nov. 30	April 1 -June 15 Sept. 1 -Oct. 10	Oct. 10 Nov. 10		Aug. 10 Oct. 15
Wisconsin	May 5 July 25	Aug. 10 Oct 15	July 15 Sept. 20	July 1 Nov. 15	Aug. 10 Oc.. 5	July 25 Nov. 20		June 15 Aug. 10	July 20 Oct. 15		Sept. 10 Nov. 20	May 20-June 20 Sept. 10-Nov. 1	Sept. 10 Nov. 20		Aug. 15 Oct. 10
Wyoming			July 25 Sept. 25		Aug. 25 Sept. 25										
Ontario, Canada	May 5 June 30		July 15 Sept. 25	Aug. 1 Mar. 1	Aug. 25 Oct. 10	Oct. 1 Jan. 15		June 25 Aug. 1			Oct. 1 Nov. 15	May 25-June 20 Sept. 20-Oct. 18			Aug. 20 Oct. 15
Quebec, Canada			June 25 Sept. 25	Oct. 1 Dec. 1	Aug. 25 Oct. 10	Oct. 1 Dec. 1		July 1 Aug. 5			Oct. 1 Oct. 15				Aug. 15 Oct. 10
Vancouver, B.C.	May 15 June 15		Aug. 1 Sept. 30		Sept. 1 Oct. 15			June 20 Aug. 1			Oct. 1 Nov. 30				Aug. 1 Oct. 15

RAW PRODUCTS: Packing Season for Dried Fruits and Nuts

	Apples	Apricots	Dates	Figs	Peaches	Pears	Prunes	Raisins	Almonds	Filberts	Walnuts
California Heavy Season	Aug 1 Nov 30	Jul 1 Aug 30	Oct 1 Dec 15	Aug 15 Dec 15	Aug 1 Nov 30	Sep 1 Nov 30	Sep 1 Nov 30	Sep 15 Dec 15	Aug 15 Oct 15		Sep 20 Dec 15
Total Season	Jan 1 Dec 31	Jan 1 Dec 31	Jan 1 Dec 31	Jan 1 Dec 31	Jan 1 Dec 31	Jan 1 Dec 31	Jan 1 Dec 31	Jan 1 Dec 31	Jan 1 Dec 31		Jan 1 Dec 31
Washington-Oregon Heavy Season	Oct 15 Dec 15						Oct 1 Nov 30			Oct 15 Dec 15	Oct 15 Dec 15
Total Season	Jan 1 Dec 1						Jan 1 Dec 1			Jan 1 Dec 31	Jan 1 Dec 31

RAW PRODUCTS: Opening and Closing Dates for Fish and Seafoods

States and Territories	Cod	Clams	Herring	Oysters	Salmon	Sardines	Shrimp	Tuna
Alabama		May 1 Nov 30		Sep 1 Mar 31			Aug 1 Jun 30	
Alaska					May 1 Nov 1			All Year
California						Aug 1 Mar 1		
Florida							Aug 1 Jun 30	
Georgia				Sep 1 Mar 31			Aug 1 Jun 30	
Louisiana				Sep 1 Mar 31			Aug 1 Jun 30	
Maine	Mar 1 Jun 1	Sep 15 Jun 1				Apr 5 Nov 30		
Maryland			Mar 15 May 15	Oct 1 Apr 30				
Massachusetts	Mar 1 Jun 1							
Mississippi				Sep 1 Mar 31			Aug 1 Jun 30	Jul 15 Oct 1
Oregon	Oct 1 Nov 30	Mar 1-Oct 1 Jun 1-Nov 30	Jun 1 Oct 1		May 1-Aug 25 Sep 10-Nov 30			
Texas				Sep 1 Mar 31			Apr 1-Jun 30 Sep 15-Dec 1	
Virginia			Mar 10 May 10					Jul 15 Oct 1
Washington		Mar 1 Jun 1	Jun 1 Oct 1	Sep 15 Apr 30	May 1 Nov 30			
Vancouver, B.C., Canada		Oct 1 Dec 31	Sep 25 Mar 1		May 1 Nov 30			

RAW PRODUCTS: Seed Requirements for Selected Vegetable Crops for Processing

Species	Seeds per oz.	Seed requirements: Oz. per 100 ft. of row	Seed requirements: Lb. per acre: Direct-seeded	Seed requirements: Lb. per acre: Trans-planted	Plant spacing: Between rows (feet)	Plant spacing: In rows (inches)	Seed planting depth (inches)
Asparagus	1,500	1	6-lb.	1-lb.	3–4	24	1
Beans, snap bush	60–90	8	50–70		2–3	2–3	1½
Beet; Swiss Chard	1,500	½	8–10		1½–2	3–4	½
Broccoli	9,000	⅛	2–3	¼	2–3	12–18	¼
Brussels Sprouts	8,000	⅛	2–3	¼	2–3	18–24	¼
Cabbage	8,500	⅛	2–3	¼	2–3	12–18	¼
Carrot	25,000	⅛	2–3		1½–2	1	¼
Cauliflower	10,000	⅛	2–3	¼	2–3	18–24	¼
Collard	8,000	⅛	2–3	¼	2–3	8–12	¼
Corn	100–200	2	10–12		3	6–12	1½
Cucumber	1,000	½	1½–2		4–6	8–12	¾
Melon	1,200	⅛	2–3		5–7	12	1
Mustard	15,000	⅛	1–2		1½–2	4–6	¼
Okra	500	¼	5–6		3	15	1
Onion	8,000	¼	3–4		1½–2	2–4	½
Peas	90–150	8–12	100–300		2½ or Br.	1–2	1
Pumpkin	100	⅛	1–2		8	18–24	1
Spinach	2,500	¼	10–15		1–2	2–3	¾
Squash, bush	300	½	3–4		4	18–24	1
Squash, vining	100	¼	2–3		6	18–24	1
Tomato	10,000	⅛	1	⅛	3–6	24–28	¼
Turnip	9,000	⅛	2–3		1½–2	2–4	¼

—Asgrow Seed Company

GOLDEN SWEET CORN

For the most discriminating buyer!

Packed under the most advanced quality control system in corn horticulture — from seed to can! New! high speed field transportation and grading system in our two modern factories preserves the field-fresh milky kernels to delight the gourmet palate.

Sweet Corn — A full line — Our specialty

Also Packers of dry bean products — canned sweet peas

IDAHO CANNING COMPANY

Since 1903 — Home of Sun Valley Lodge Brand

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OREGON'S FINEST ★ ★ ★ ★

Canners and Packers of Quality Fruits, Berries and Vegetables

WESTERN OREGON PACKING CORP.

Plant and Offices . . . Corvallis, Oregon

Brands: HEART OF THE VALLEY • PACIFIC CLIPPER • ROSE FESTIVAL

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Blue Goose

you're buying

Quality

The Pacific Northwest is world famous for its fine quality fruits and vegetables. The pick of the crop is selected and packed by this area's top processors to be sold under the Blue Goose label. Whether you're buying for retail or institutional selling . . . for quality and for value . . . demand Blue Goose.

America's Finest

FROZEN FRUITS and VEGETABLES

have made an important move

American National Processors, Inc. has moved its main office to Portland, Oregon. This centrally located transportation terminal makes an ideally situated site for easy distribution to all Western cities and to Eastern or foreign markets as well . . . another step in our program to serve you better with fresh frozen Blue Goose Products.

Grown and Packed by:

- Springbrook Packing Co., Springbrook, Oregon
- Umatilla Canning Co., Milton-Freewater, Oregon
- Washington Canners, Vancouver & Yakima, Washington
- Idaho Potato Growers, Idaho Falls, Idaho

AMERICAN NATIONAL PROCESSORS, Inc.

Distributors of BLUE GOOSE Frozen Foods

1601 N. Columbia Blvd., Portland, Oregon

P. O. Box 5633 Phone BU 5-7781

Reference Data

RAW PRODUCTS: Conversion Factors

Commodity	Unit	Approximate equivalent
Apples	1 pound dried	8 pounds fresh
Do	1 pound chops	5 pounds fresh
Do	1 barrel	3 boxes or 3 bushel
Do	1 case canned[1]	1.4 bushels fresh
Applesauce	1 case canned[1]	1.2 bushels fresh
Apricots	1 pound dried	5½ pounds fresh
Beans, lima	1 pound shelled	2 pounds unshelled
Beans, snap	1 case canned[2]	0.010 tons fresh
Cane sirup	1 gallon	5 pounds sugar
Cherries, sour	1 case canned[1]	0.023 tons fresh
Chickens	1 pound live wt.	0.89 lbs. N.Y. dressed
Do	do	0.65 lbs. ready-to-cook
Corn, sweet	1 case canned[2]	0.038 tons fresh
Eggs, shell	1 pound	0.87 lbs. frozen or liquid whole
Do	do	0.23 lbs. dried whole
Figs	1 pound dried	3 lbs. fresh in Calif.; 4 lbs. fresh elsewhere
Grapefruit, Fla.	1 case juice[2]	0.83 box fresh fruit
Maple sirup	1 gallon	8 pounds maple sugar
Nuts:		
Almonds	1 pound shelled	2 pounds unshelled
Brazil	do	2 pounds unshelled
Cashews	do	4.55 pounds unshelled
Chestnuts	do	1.19 pounds unshelled
Filberts	do	2.5 pounds unshelled
Pecans:		
Seedling	do	2.78 pounds unshelled
Improved	do	2.50 pounds unshelled
Pignolias	do	1.3 pounds unshelled
Pistachios	do	2 pounds unshelled
Walnuts:		
Black	do	8⅓ pounds unshelled
English	do	2.56 pounds unshelled
Oranges, Fla.	1 case canned juice[2]	0.63 box fresh
Peaches, Calif, frees.	1 pound dried	5½ pounds and 6½ pounds fresh
Peaches, Calif., clings.	do	7½ pounds fresh
Peaches, clings.	1 case canned[1]	1.0 bushels fresh
Do	do	0.0230 tons fresh
Peanuts	1 pound shelled	1½ pounds unshelled
Pears	1 pound dried	5½ pounds fresh
Pears, Bartlett	1 case canned[1]	1.1 bushels fresh
Do	do	0.026 tons fresh
Peas, green	1 pound shelled	2½ pounds unshelled
Do	1 case canned[2]	0.010 tons fresh (shelled)
Prunes	1 pound dried	2½ lbs. fresh in Calif; 3 to 4 lbs. fresh elsewhere
Raisins	1 pound	4 pounds fresh grapes
Rice, milled	100 pounds	152 pounds rough
Sugar	1 ton raw	0.9346 tons refined
Tomatoes	1 case canned[2]	0.027 tons fresh
Turkeys	1 pound live wt.	0.90 lbs. N.Y. dressed
Do	do	0.75 lbs. ready-to-cook

[1] Case of 24 number 2½ cans.
[2] Case of 24 number 2 cans.

—U.S. Department of Agriculture

RAW PRODUCTS: Field Containers

Type of Container	Dimensions	Capacity
Lug Boxes:		
Standard Western picking box for fruit.	7 3/4 x 14 x 21 7/8	50 lbs.
Standard Mid-West and East Picking Box	5 13/16 x 14 1/2 x 20 1/4	36 lbs.
Northwest Apple Box	10 1/2 x 11 1/2 x 18	45 lbs.
Eastern Apple Box	11 x 13 x 17	55 lbs.
Brentwood Lug	4 5/7 x 12 1/2 x 16 1/8	24 lbs.
Cherry Lug	4 1/8 x 11 1/2 x 14	16 lbs.
Bushel, Standard U.S.	varies	2,150.42 cu in.
Hampers, crates		
Tomato	12" high	5/8 bu. or 33 lbs.
James Crate (tomato)	17 x 14 x 9 1/2	4/5 bu. or 35 lbs.
Pallet Boxes		
Wirebound for bulk Vegetables	46 x 40 x 29 3/16	25 bu.
Wirebound for Northwest Apples	47 x 47 x 28 1/2	22 bu.
Wirebound for Calif./-Ariz. Citrus	48 x 48 x 34 1/2	25 bu.
Wirebound for Virginia Apples	40 x 48 x 38	22 bu.
Wirebound for New Jersey Apples	38 x 44 x 29 1/2	19 bu.
Wirebound for Michigan Apples		17 bu.

—U.S. Department of Agriculture, National Wirebound Box Association, Package Research Laboratory, National Wooden Box Assn.

RAW PRODUCTS: Gross Weights in Pounds of Fruits Needed to Fill a Dozen Cans

	No. 2	No. 2½	Syrup No. 10	Water No. 10
Apples				140
Beans	12			61
Beets	21			85
Blackberries	12		60	66
Broccoli		55		228
Black Cherries	12	18	60	66
Black Cherries, pitted	16	24	80	80
R.S.P. Cherries	16	24	80	80
Gooseberries	12		57	57
Loganberries	12		60	66
Bartlett Pears	16	28	97	105
Plums		18	60	60
Italian Prunes		18	60	60
Pumpkin		36		126
Black Raspberries	12		60	66
Red Raspberries	12		60	66
Strawberries	12.5		63	68

—Northwest Canners Assn.

The Premium Pack of the Pacific Northwest!

YES SIR! With "Yes Madame" brand you can capitalize on the trend to Pacific Northwest canned fruits and vegetables. It's fancy quality —all of it—for customers who care enough to pay a penny or two more . . . Also packed under many of America's best known private labels and national brands.

Blue Lake Green Beans
Freestone Peaches
Yellow Wax Beans
Apple Products
Bartlett Pears
Purple Plums
Asparagus
Cherries
Carrots
Berries
Beets
Peas
Corn

Grown and Packed by:

Fruitland Canning Assn., Fruitland, Idaho
Springbrook Packing Co., Springbrook, Ore.
Umatilla Canning Co., Milton-Freewater, Ore.
Washington Canners, Vancouver & Yakima, Wn.

Washington-Oregon-Idaho Foods, Sales Agents

P. O. Box 30, Vancouver, Wash.

HOW TO MAKE MORE FROZEN FOOD NET PROFITS WITH LESS WORRY AND WORK.

Blue Chip Supermarkets across the country do it by buying FLAV-R-PAC with these features:

GRADE A QUALITY
PRICED FOR YOU TO PROFIT
BRIGHT MERCHANDISING PACKAGES
RETAIL POLY BAGS (BERRIES AND VEGETABLES)
PROTECTED SUPPLY
GROWN AND PACKED IN THE PACIFIC NORTHWEST
MERCHANDISING AIDS
PROMOTIONS

NORTH PACIFIC CANNERS & PACKERS, INC.
5200 S. E. McLoughlin Blvd.
Portland 2, Oregon

Reference Data

RAW PRODUCTS: Plant Food Removals of Selected Fruit and Vegetables for Processing

	Acre Yield	Nitrogen	Available Phosphate	Potash	Total
Apples	500 bu.	30	10	45	63
Asparagus	1 ton	64	32	80	176
Beans, dry	30 bu.	75	25	25	125
Straw		22	7	31	60
	Total	97	32	56	185
Beans, limas	1 ton	55	12	26	93
Forage	4 tons	40	12	87	139
	Total	95	24	113	232
Beans, snap	2 tons	95	7	12	114
Forage	8 tons	40	5	40	85
	Total	135	12	52	199
Beets	10 tons	50	10	35	95
Tops	6 tons	10	10	60	80
	Total	60	20	95	175
Cabbage	20 tons	130	35	130	295
Carrots	15 tons	60	20	65	145
Tops	7 tons	70	10	125	205
	Total	130	30	190	340
Corn, sweet—					
Ears & Husks	2 tons	15	2.5	8	25.5
Stalks	4 tons	31	9.7	16	56.7
	Total	46	12.2	24	82.2
Cucumbers	2.5 tons	50	10	15	75
Onions	7.5 tons	45	20	40	105
Oranges	800 boxes	85	30	140	255
Peaches	600 bu.	35	20	65	120
Peas, green	1 ton	20	5	10	35
Forage	6 toss	30	10	25	65
	Total	50	15	35	100
Spinach	5 tons	50	15	30	95
Squash	8.8 tons	18.2	6.9	30.6	55.7
Vines	8.7 tons	55.6	7.4	70.9	133.9
	Total	73.8	14.3	101.5	189.6
Sweet potatoes	300 bu.	45	15	75	135
Vines		30	5	40	75
	Total	75	20	115	210
Tomatoes	15 tons	90	30	120	240
Turnip (Roots)	10 tons	45	20	90	155
Peanuts	2500 lbs.	90	10	15	115
Potatoes	400 bu.	80	30	150	260
Tops	10 tons	95	15	140	250
	Total	175	45	290	310
Sugar beets—roots	15 tons	60	20	50	130
Tops		60	23	92	175
	Total	120	43	142	305
Sugarcane	30 tons	96	54	270	370

—National Plant Food Institute, National Canners Assn.

Reference Data

PROCESSING AND SHIPPING: Glass Container Capacities, Dimensions and Uses

GCMI Item No.	Overflow Capacity Fl. Oz.	Wt. of Jar Ozs.	Dimensions Height	Dimensions Diameter	Uses
10-14	4 1/4	3 3/4	3 25/64	2 3/32	4 oz. mayonnaise
10-24	7 3/4	4 3/4	4 1/8	2 3/8	1/2 lb. peanut butter
10-28	8 3/4	5 3/4	4 11/32	2 17/32	1/2 pint mayonnaise, relish, 9 oz. mustard
10-30	9 1/2	6	4 31/64	2 37/64	3/4 lb. preserves
10-39	12 1/2	6 1/2	4 27/32	2 29/32	For placed olives, 1 lb. jam, 12 oz. pickles
10-48	15 1/2	7 7/8	5 1/8	3 1/16	1 lb. peanut butter, mustard — 1 lb. 2 oz. relish
10-51	16 1/2	8	5 7/32	3 5/32	1 pint mayonnaise, pickle relishes, 1 lb. mustard
10-63	24 1/2	10 5/8	5 61/64	3 37/64	2 lb. preserves, 1 pt. 8 oz. pickles, 28 oz. apple butter
10-72	31	12 1/4	6 9/16	3 53/64	2 lb. peanut butter, mustard
10-75	32 5/8	12 1/2	6 3/4	3 55/64	1 quart salad dressing, pickles
10-81	48 3/4	19	7 11/16	4 27/64	4 lb. jam, 1 qt. 1 pt. pickles
11-76	32 5/8	12 1/2	7 9/64	3 43/64	1 quart capacity (mayonnaise, pickles)
12-86	65 1/4	25	8 3/8	4 55/64	1/2 gallon capacity (pickles)
12-96	130 1/2	42	10 1/16	6 19/64	1 gallon capacity (pickles, mayonnaise, mustard)
20-51	16 1/2	8 1/2	5 3/64	3 7/32	same as 10-51
20-75	32 5/8	12 1/2	7 1/16	3 3/4	same as 10 75
21-85	58 1/2	20	7 15/32	5 1/32	5 lb. syrup
22-26	8 3/8	6 1/4	4 25/32	2 41/64	1/2 pint salad dressing, 1/2 lb. mustard
22-40	12 1/2	8 1/4	5 25/64	3 7/64	1 lb. preserves
22-48	15 1/2	9 1/2	5 55/64	3 17/64	1 lb. peanut butter

THE FLAV-R-PAC SECRET IS NO SECRET ANY MORE!

Too many supermarket operators have found out that Flav-R-Pac flavor is a distinctive Pacific Northwest flavor that customers like. And also that Flav-R-Pac makes better-than-average net profits. So it just isn't a secret any more. If your canned foods department needs a turnover lift, why not investigate Flav-R-Pac?

From the Pacific Northwest

NORTH PACIFIC CANNERS & PACKERS, INC.
5200 S. E. McLoughlin Blvd.
Portland 2, Oregon

PROCESSING AND SHIPPING: Glass Container Capacities, Dimensions and Uses *(Continued)*

GCMI Item No.	Overflow Capacity Fl. Oz.	Wt. of Jar Ozs.	Dimensions Height	Dimensions Diameter	Uses
22-51	16 1/2	10	6	3 11/32	1 pint salad dressing, pickles, relishes, 1 lb. mustard
22-63	24 1/2	12 5/8	6 3/4	3 51/64	2 lb. preserves
22-75	32 5/8	14 1/2	7 1/2	4 5/64	1 qt. mayonnaise, edible oils, 1 qt. pickles, 2 lb. mustard
24-96	130 1/2	41	9 55/64	6 5/16	same as 12-96
26-24	7 3/4	5 1/2	3 33/64	2 19/32	1/2 lb. peanut butter
26-48	15 1/2	8 3/4	4	3 11/32	1 lb. peanut butter
28-60	22 3/4	10 1/2	5 1/2	3 29/64	1 1/2 lbs. peanut butter
29-16	5	3 9/16	3 17/32	2 7/64	Approximately 4 3/4 oz. baby food
29-25	8.2	5 1/8	3 7/8	2 17/32	Approximately 7 3/4 oz. baby food
50-08	2 1/4	3	4 3/32	1 37/64	2 fl. oz. various liquids
50-28	8 3/4	6 1/2	5 31/32	2 13/32	8 fl. oz. liquids, 1/2 pint French dressing
50-40	12 3/4	8 1/2	6 49/64	2 11/16	12 fl. oz. liquids.
50-51	16 7/8	10 1/2	7 3/8	2 61/64	16 fl. oz. vinegar, apple juice, 1 1/2 lb. syrup
50-64	25 3/8	14	8 3/8	3 11/32	24 fl. oz. liquids, 2 lbs. syrup
50-76	33 7/16	17	9 5/16	3 39/64	1 quart vinegar
52-33	10 1/4	9 1/4	7	2 29/64	12 oz. Chili Sauce
50-91	105 5/8	37	10 5/32	6 5/64	Corresponds to No. 10 can

CATSUP BOTTLE

GCMI Item No.	Overflow Capacity Fl. Ozs.	Wt. of Jar Ozs.	No. of Panels	Dimensions Height	Dimensions Diameter	Suggested Uses
58-22	7 1/8	7 1/4	8	7	2 7/32	8 oz. catsup
58-38	12 1/4	10 1/4	8	8 1/4	2 39/64	14 oz. catsup
58-39	12 1/4	10 1/4	16	8 1/4	2 19/32	14 oz. catsup
59-38	12 1/16	10 1/4	8	8 1/4	2 37/64	14 oz. catsup
59-39	12 1/16	10 1/4	16	8 1/4	2 35/64	14 oz. catsup

FRUIT AND VEGETABLE JAR

15-53	17	7 1/4	Shd.	4 11/16	3 1/4	Corresponds to No. 303 can **
15-71	28 3/8	11 1/4	Shd.	4 7/8	4 3/32	Corresponds to No. 2 1/2 can **
16-53	17	8 1/2	Bead	5 19/64	3 7/64	same as 15-53 **
16-71	28 3/8	13 1/2	Bead	6 11/32	3 47/64	same as 15-71 **

**Weight of contents varies according to product packed.

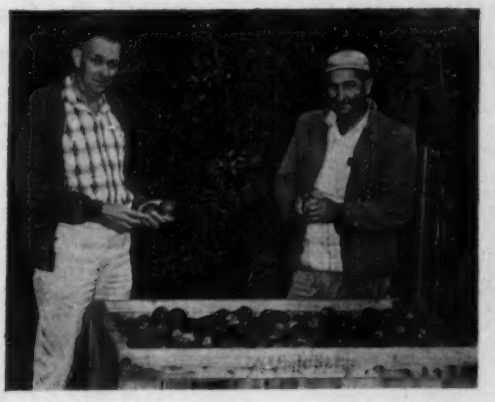
—Glass Containers Manufacturers Institute

PROCESSING AND SHIPPING: Tin Container Sizes, Names, Capacities, and Weights

Name of Can	Diameter	Height	Fluid Ounces	#2 Can Factor
2 oz. Paste	202	108	2.1	.1061
2Z Mushroom	202	204	3.5	.1768
3 oz. Paste	202	214	4.7	.2358
6Z	202	308	5.8	.2947
Citrus and Grape Juice	202	314	6.5	
6 oz. Paste	202	309	5.9	.3006
8 oz. Potted Meat	208	208		
6½ oz. Paste	208	212	5.9	.3003
4 oz. Olive	211	200	4.7	.2387
5 oz. Chili	211	204	5.4	.2754
Baby Food				
4Z or 4 oz. Mushroom	211	212	6.9	.3489
8Z Short	211	300	7.6	.3856
8 oz. Sauce	211	304	8.3	.4223
Small Soup	211	311.5	9.7	.4912
No. 1 Picnic	211	400	10.5	.5325
No. 211 Cylinder	211	414	13.1	.6610
Pint Olive	211	600	16.3	.9263
4Z Pimiento	300	108	4.0	.2051
7 oz. Pimento	300	206	7.2	.3646
Dry Beans	300	308	11.3	.5698
8Z Mushrooms	300	400	13.0	.6609
No. 300	300	407	14.6	.7407
No. 300 Cylinder	300	509	18.6	.945
No. 1 Tall	301	411	16.0	.8126
No. 303	303	406	16.2	.8215
No. 303 Cylinder	303	509	21.0	1.060
No. 1 Flat	307	203	8.5	.4328
Kitchenette	307	214	11.8	.5970
No. 2 Vacuum	307	306	14.1	.7164
No. 95	307	400	17.1	.8657
No. 2	307	409	19.7	1.0000
Jumbo	307	510	24.8	1.2537
No. 2 Cylinder	307	512	25.3	1.2836
No. 2 Tall	307	700	32.4	1.582
Quart Olive	307	704	32.4	1.6418
No. 2 Quart	307	710		1.7613
No. 1¼	401	207.5	13.8	
No. 2½	401	411	28.6	1.4493
No. 3 Vacuum	404	307	22.9	1.1616
No. 3 5" Special	404	500	35.7	1.7542
No. 3 Cylinder	404	700	49.6	2.515
No. 5 Squat	603	408	65.2	3.314
No. 10	603	700	105.1	

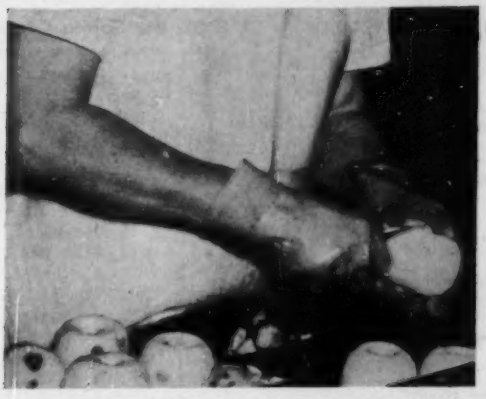
—American Can Co., Food Machinery and Chemical Corp., Department of Commerce

WAPATO Produces the QUALITY PACK

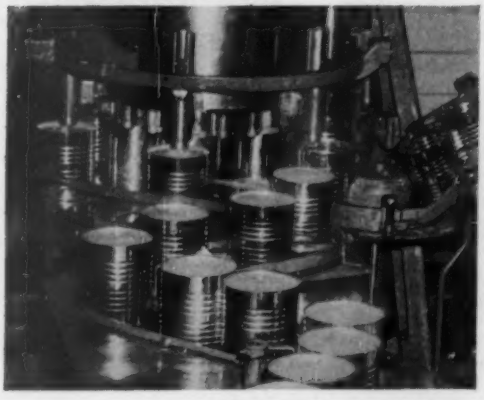


1. Purchases are made from quality growers.

2. Time from orchard (or field) to processing is held to a minimum.



3. Careful preparation will be evident in the can.



4. Finished quality and quantity are a credit to your reputation.

WAPATO EVAPORATING CO.

506 N. Track Road, Wapato, Washington TR 9-4501

Reference Data

MARKETING AND QUALITY CONTROL: Per Capita Consumption of Food Products in the U.S.

	Average 1947-1949	1955	1956	1957	1958	Prelim. 1959
Total Food Consumed[1]	1,569	1,514	1,518	1,496	1,483	1,488
Fruits and Juices[2]	174.9	161.2	160.4	161.2	155.0	160.1
Canned	34.8	35.5	35.7	35.6	35.5	33.4
Frozen	4.0	19.6	19.4	20.6	16.9	20.0
Dried	3.9	3.6	3.6	3.6	3.0	3.1
Fresh	132.2	101.6	100.4	99.3	97.8	101.5
Vegetables[2]	323.8	307.8	301.2	301.0	294.6	292.2
Canned	39.2	43.5	43.9	43.9	44.3	44.1
Frozen	2.9	6.6	7.3	7.5	7.7	7.8
Fresh (incl. potatoes, dry beans)	281.7	257.7	250.0	251.6	242.6	240.3
Meats (carcass weight)	148.5	162.8	166.7	159.1	152.0	160.1
Canned	7.4	10.2	11.0	10.6	10.7	10.7
Poultry (including eggs)	69.3	73.2	76.2	76.8	78.3	78.8
Fish	10.5	10.4	10.3	10.1	10.7	10.7
Canned	3.9	3.8	3.9	3.9	4.2	4.2
Dairy	418.0	422.0	424.0	420.0	414.0	414.0
Fats and Oils (total fat)	42.4	45.9	45.3	44.4	46.1	4.59
Sugar	95.1	97.5	98.4	97.1	97.7	97.7
Grains	171.0	152.0	150.0	148.0	149.0	147.0
Coffee	18.2	15.3	15.5	13.7	13.9	15.9
Tea	.6	.6	.6	.6	.6	.6
Cocoa Beans	4.1	3.8	4.2	4.1	3.7	4.2
Peanuts (salted)	4.4	4.1	4.4	4.5	4.5	4.5

[1] Retail weight equivalent. Estimated from per capita data by means of average loss factors with the addition of estimates of supplies from rural and urban home gardens and of minor food items. Figures from USDA supplements to Agriculture Handbook 62, "Consumption of Food in the U.S." and USDA periodical, "National Food Situation."

[2] Total is processed weight of processed foods, fresh weight of fresh foods. Exception is frozen juices which is in single strength weight. Also included in fruit juices are chilled fruits and juices.

MARKETING AND QUALITY CONTROL: Per Capita Consumption[1]—Fresh Weight Equivalent

	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959[2]
Asparagus															
Fresh	1.1	1.1	1.1	.9	.9	.9	.8	.8	.8	.7	.7	.8	.8	.8	.8
Canned	.5	1.3	.8	.9	.9	.9	.9	.9	1.3	1.0	.9	1.0	1.0	1.0	1.0
Frozen	.3	.2	.2	.3	.2	.2	.3	.3	.3	.3	.3	.3	.3	.4	.3
Beans, Lima (in pod)															
Fresh	.6	.7	.6	.6	.6	.5	.5	.4	.4	.4	.3	.3	.3	.3	.3
Canned	.5	.5	.5	.5	.5	.8	.7	.7	.7	.7	.7	.7	.7	.6	.6
Frozen	.4	.6	.8	.8	1.1	1.1	1.2	1.6	1.6	1.5	1.6	1.7	1.6	1.6	1.6
Beans, Snap															
Fresh	4.8	4.7	4.0	4.1	4.1	3.9	3.8	3.4	3.5	3.3	3.4	2.8	2.9	2.6	2.5
Canned	2.4	2.4	2.0	2.1	2.2	2.5	2.4	2.5	2.6	2.7	2.9	3.0	2.9	3.1	3.1
Frozen	.2	.2	.3	.4	.4	.4	.6	.7	.7	.8	.8	.9	.9	1.0	1.0
Cauliflower															
Fresh	3.5	3.6	3.3	3.4	3.1	3.0	2.8	2.6	2.4	2.6	2.2	2.3	2.5	2.3	1.9
Frozen	.1	.2	.1	.3	.3	.3	.4	.6	.5	.6	.6	.6	.5	.6	.7
Corn (weight on the cob)															
Fresh	7.9	7.7	7.7	8.7	7.6	7.7	7.6	7.8	7.8	8.5	8.3	8.2	7.8	8.3	8.3
Canned	14.1	15.8	14.8	12.6	12.4	13.2	12.4	12.3	13.1	13.2	13.5	13.5	13.6	13.6	12.8
Frozen	.5	.6	1.0	1.0	.9	.9	1.3	1.6	1.9	1.8	2.1	2.8	2.5	2.9	2.8
Peas, Green (Weight in pod)															
Fresh	1.6	1.4	1.1	.9	.8	.7	.6	.5	.4	.4	.4	.3	.3	.3	.3
Canned	12.1	12.8	9.8	9.8	8.9	9.2	9.0	8.6	8.3	8.3	8.1	8.2	8.0	7.9	8.2
Frozen	1.8	1.7	2.3	2.6	2.1	2.4	2.8	3.4	3.5	3.9	3.8	4.2	4.4	4.6	4.5
Pumpkin and Squash															
Canned	1.2	1.6	1.5	1.5	1.2	1.5	1.6	1.8	1.6	1.8	1.9	1.8	1.9	1.7	1.7
Frozen	.1	.*	.1	.1	.*	.1	.1	.1	.1	.1	.1	.2	.2	.1	.2
Spinach															
Fresh	2.3	2.0	1.9	1.7	2.0	1.7	1.6	1.5	1.4	1.1	1.0	1.1	1.0	1.0	.9
Canned	1.0	1.4	1.0	.9	1.0	.8	1.1	.9	.9	.7	.8	1.0	.8	.9	.9
Frozen	.5	.4	.4	.6	.5	.7	.9	.9	.9	.9	1.0	1.0	1.0	1.0	1.1
Tomatoes and Tomato Products (not including canned soup)															
Fresh	16.1	15.4	13.9	13.9	13.5	12.9	13.3	13.1	12.8	12.9	12.8	12.0	12.0	11.6	12.4
Canned	44.0	43.4	37.1	32.6	34.0	39.6	41.0	38.6	40.2	38.2	41.3	42.1	42.6	43.6	44.3
Apples and Applesauce[3]															
Fresh	22.9	23.0	25.4	26.3	25.0	23.2	25.9	21.9	21.0	20.1	20.0	19.3	19.3	22.5	21.9
Canned	1.7	1.9	2.4	2.8	2.9	3.5	3.4	4.0	3.5	3.6	4.1	4.4	4.4	4.7	4.5
Frozen	.8	1.0	.6	.6	.5	.5	.4	.5	.4	.5	.7	.9	.6	.6	.6
Dried	.8	1.5	1.3	1.3	1.1	1.2	1.0	1.0	.9	.9	.9	.7	.4	.8	.8
Apricots															
Fresh	.7	.8	.6	.6	.6	.3	.4	.4	.4	.3	.4	.2	.3	.2	.3
Canned	1.0	2.3	.7	.8	.9	.9	.8	.8	.9	.8	.9	.9	.8	.7	.7
Frozen	.4	.3	.1	.1	.1	.1	**	**	**	**	**	**	**	**	**
Dried	.7	.8	.8	.8	.9	.8	.7	.6	.6	.6	.6	.6	.4	.3	.3
Cherries															
Fresh	1.1	1.0	.9	.8	1.1	.8	.7	.8	.7	.7	.8	.5	.6	.5	.4
Canned	.4	1.4	.6	.8	.9	1.3	1.0	1.0	1.0	.9	1.0	.9	.8	.7	.8
Frozen	.3	.4	.6	.7	.5	.6	.6	.7	.6	.6	.7	.7	.7	.6	.7
Grapefruit[4]															
Fresh	13.5	14.0	13.9	12.9	10.9	8.2	10.3	10.5	9.7	11.0	10.7	10.5	9.6	8.7	9.2
Juices, citrus[4]															
Canned	21.6	34.8	30.2	36.2	26.2	19.8	20.8	17.00	15.9	15.8	[4] 16.6	[4]16.3	[4]17.2	[4]16.9	[4]14.2
Oranges[4]															
Fresh	43.1	37.9	41.5	35.7	30.7	26.9	28.8	27.9	27.6	24.5	25.1	22.9	21.9	17.8	20.1
Canned	10.5	16.2	16.6	20.8	15.0	12.5	11.5	10.2	9.2	8.7	7.8	7.4	7.4	7.9	5.4
Frozen	.....	.3	.2	.5	6.6	10.1	14.1	20.0	21.9	23.5	26.6	25.8	28.2	21.6	26.9
Peaches															
Fresh	18.2	16.6	14.8	11.3	11.6	7.8	9.4	10.7	10.3	10.0	6.0	9.0	8.4	10.5	9.7
Canned (incl. spiced)	5.2	5.6	4.7	4.8	5.2	6.2	5.0	5.3	5.6	5.8	5.7	5.6	6.2	6.2	6.2
Frozen	.4	.6	.4	.3	.2	.2	.2	.2	.2	.2	.3	.3	.3	.2	.2
Dried	1.5	1.3	1.0	1.0	.9	.8	.7	.7	.6	.6	.6	.5	.4	.3	.5
Pineapple															
Canned	1.3	5.8	5.7	5.8	5.8	5.9	5.9	5.7	6.2	5.8	5.9	5.8	5.8	5.7	5.6
Prunes															
Dried	4.7	4.5	3.0	2.1	2.2	2.6	2.5	2.2	2.3	2.2	2.2	1.9	2.2	1.8	1.3
Raisins and Currants															
Dried	12.4	9.8	7.6	7.7	8.0	7.6	7.4	7.5	7.5	7.6	7.5	7.3	6.9	6.5	6.4
Salads and Cocktail															
Canned	2.6	2.8	2.3	2.3	2.4	2.8	2.1	2.6	2.2	2.3	2.6	2.7	2.8	2.8	2.8
Strawberries															
Fresh	1.3	1.6	1.9	1.8	1.6	1.6	1.8	1.6	1.4	1.3[3]	1.2	1.5	1.7	1.6	1.4
Frozen	.2	.3	.6	.4	.8	.7	.8	1.0	1.0	1.2	1.2	1.2	1.2	1.2	1.0

—U.S. Department of Agriculture

*Less than .05 lbs.

[1] All fruits are shown in a calendar year basis with the exception of citrus fruits, beginning October or November prior to year indicated. [2] Preliminary. [3] Includes only apples from commercial areas sold and used in farm households. [4] Includes chilled citrus.

Reference Data

MARKETING AND QUALITY CONTROL: List of USDA Standards for Grades of Processed Foods

(As of July 15, 1960)

Canned and similarly processed)	Effective
Apples	Oct. 17, 1953
Apple butter	August 5, 1957
Apple juice	June 26, 1950
Applesauce	Sept. 18, 1950
Apricots	May 17, 1957
Asparagus	Mar. 12, 1957
Beans, dried	Oct. 24, 1947
Beans, green and wax	Mar. 2, 1953
Beans, lima	Mar. 20, 1960
Beets	Feb. 4, 1955
Blackberries and other similar berries.	Dec. 1, 1956
Blueberries	Mar. 20, 1951
Amended	Aug. 19, 1959
Carrots	July 2, 1959
Cherries, red sour (tart) pitted	June 23, 1949
Cherries, sweet	Feb. 25, 1957
Amended	July 15, 1960
Chili sauce	Oct. 20, 1953
Corn, cream style	July 27, 1953
Corn, whole kernel (or whole grain)	July 30, 1952
Cranberry Sauce	Mar. 19, 1951
Figs, kadota	August 16, 1957
Fruit cocktail	August 17, 1953
Fruit jelly	Jan. 2, 1948
Fruit preserves (or jams)	May 25, 1956
Fruits for salad	July 5, 1960
Grapefruit	Nov. 6, 1959
Grapefruit juice	Oct. 19, 1954
Grapefruit juice for manufacturing	Mar. 20, 1957
Grapefruit and orange juice, blended	Oct. 19, 1954
Grapefruit and orange for salad	Jan. 21, 1960
Grape juice	May 14, 1951
Hominy	Mar. 10, 1958
Lemon juice	July 1, 1941
Lemon juice, concentrated for manufacturing	Aug. 1, 1959
Mushrooms	Jan. 19, 1953
Okra	July 8, 1957
Olives, green	June 1, 1946
Olives, ripe	Nov. 16, 1959
Onions	Nov. 2, 1957
Orange juice	Mar. 13, 1956
Amended	Jan. 21, 1960
Orange juice, concentrated	Dec. 12, 1953
Orange juice, concentrated for manufacturing	Dec. 20, 1957
Orange marmalade	June 22, 1951
Peaches, freestone	July 22, 1957
Peaches, yellow clingstone	July 13, 1957
Pears	Dec. 1, 1951
Peas	May 13, 1955
Peas, field and black-eye	April 17, 1950
Pickles, cucumber	April 30, 1954
Pimientos	Aug. 16, 1955
Pineapple	Mar. 16, 1957
Pineapple juice	Mar. 16, 1957
Plums	August 19, 1952
Potatoes, white	Feb. 10, 1950
Prunes, canned dried	Mar. 1, 1946
Pumpkin (squash)	Mar. 9, 1956
Raspberries, Red	Mar. 1, 1958
Sauerkraut	May 10, 1957
Spinach	May 12, 1950
Squash (Summer type)	May 25, 1959
Succotash	Mar. 15, 1944
Sweet potatoes	July 9, 1951
Tangerine juice	July 29, 1949
Tangerine juice, concentrated for manufacturing	Oct. 31, 1955
Tomatoes	August 1, 1946
Tomato catsup	August 31, 1953
Tomato juice	June 24, 1958
Tomato juice, concentrated	July 15, 1960
Tomato paste	Sept. 15, 1944
Tomato pulp	Jan. 1, 1945
Tomato sauce	May 10, 1954
Tomatoes & okra	Dec. 24, 1957

Dried or Dehydrated (Low-moisture, if so stated)	
Apples	Oct. 24, 1955
Apples, dehydrated (low moisture)	Nov. 29, 1955
Apricots	June 1, 1945
Apricots, dehydrated, low-moisture	Nov. 30, 1959
Currants	Aug. 29, 1958
Dates	August 26, 1955
Figs	Dec. 27, 1955
Grapefruit juice (dehydrated)	Mar. 19, 1956
Orange juice (dehydrated)	Jan. 27, 1956

Any of the United States Standards for Grades listed may be secured upon request from: Processed Products Standardization and Inspection Branch Fruit and Vegetable Div., AMS U. S. Department of Agriculture Washington 25, D. C.

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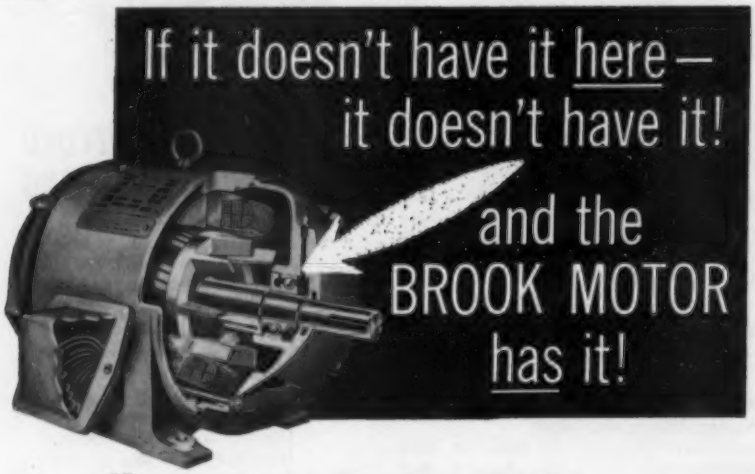

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250 University Ave., Toronto, Canada

Reference Data

Peaches	June 30, 1945
Peaches, dehydrated, low-moisture	Nov. 30, 1959
Pears	June 30, 1945
Prunes	Nov. 26, 1956
Prunes, dehydrated low moisture	June 13, 1960
Raisins (processed)	Oct. 1, 1957

Frozen or Chilled (If so stated)

Apples	May 17, 1954
Apricots	June 30, 1945
Grades for mgf.	July 1, 1946
Asparagus	April 18, 1952
Beans, green and wax	August 25, 1954
Beans, lima	April 16, 1957
Berries (blackberries, boysenberries, etc.)	Aug. 15, 1946
Blueberries	May 7, 1955
Broccoli	Mar. 1, 1959
Brussels Sprouts	May 11, 1951
Carrots, diced	Mar. 30, 1953
Cauliflower	Nov. 12, 1951
Cherries, red sour (tart) pitted	June 18, 1949
Cherries, sweet	March 1, 1958
Corn-on-the-cob	May 15, 1958
Corn, whole kernel (or whole grain)	August 1, 1952
Grapefruit	Feb. 20, 1948
Grapefruit juice, concentrated	Dec. 28, 1956
Grapefruit juice and orange juice, concentrated, blended	Dec. 10, 1951
Grape Juice concentrated sweetened	No. 1, 1957
Leafy greens	June 13, 1952
Lemonade, frozen concentrate	Feb. 1, 1958
Amended	Aug. 4, 1959
Limeade, frozen concentrate	Nov. 2, 1956
Okra	Mar. 16, 1959
Onion rings, breaded	Oct. 17, 1959
Orange Juice, chilled	June 16, 1959
Amended	Dec. 10, 1959
Orange juice, concentrated	Dec. 1, 1955
Peaches	June 30, 1945
6 Grades for mfg.	June 1, 1946
Peas	May 28, 1959
Peas and carrots	Mar. 20, 1955
Peas, field and black-eye	Sept. 18, 1959
Peppers, sweet	Mar. 13, 1959
Pineapple	Jan. 25, 1949
Plums	Mar. 6, 1956
Potatoes, french fried	Nov. 20, 1954
Raspberries	August 16, 1948
Rhubarb	August 15, 1945
Spinach	Oct. 26, 1951
Squash (cooked)	Oct. 5, 1953

Squash (summer type) ...April 3, 1953
Strawberries .....Feb. 1, 1958
Succotash .....Mar. 6, 1959

Turnip Greens with
Turnips .....Aug. 19, 1958

Vegetables, mixed .....May 24, 1954

Sugar Products

Honey, comb .....August 1933
Honey, extracted .....April 16, 1951

Maple sirup for
reprocessing .....Feb. 15, 1940
Maple sirup, table .....Feb. 15, 1940
Molasses, sugarcane ....Nov. 16, 1959

Sirup, refiners' .....Jan. 5, 1952
Sirup, sugarcane .....April 16, 1957

Miscellaneous Products

Cherries, sulfured .....June 12, 1951

Olive oil .....Mar. 22, 1948
Olives, salt cured .....Nov. 25, 1940
Olives Sicilian style ....Nov. 25, 1940

Peanut butter .....Sept. 1, 1942
Potatoes, peeled white
(fresh) .....June 8, 1954

Sauerkraut, bulk .....May 27, 1935

MARKETING/QUALITY CONTROL: Field Offices of USDA Processed Products Standardization and Inspection Div.

Official inspection of processed foods is available from cities listed below which can be reached conveniently.

Applications for inspection should be addressed by mail, telegraph or telephone to Processed Products Inspection, Fruit and Vegetable Division, AMS, United States Department of Agriculture, at the cities listed below:

Eastern District

WASHINGTON 25, D. C., Processed Products Standardization and Inspection Branch, Fruit and Vegetable Division; DUdley 8-6328. Ext. 4693 & 6328.

FOREST PARK, GEORGIA, Atlanta State Farmers Market; POplar 7-6564.

BALTIMORE 2, MARYLAND, 307 Appraisers Stores Building; PLaza 2-8460 Ext. 694 & 695

EASTON, MARYLAND, Post Ofice Bldg. (Mail: P. O. Box 762); TAlbot 2-3383.

MIAMI, FLORIDA, c/o Florida Juice, Inc., 2700 N. W. Second Ave.; FRanklin 3-7447.

NEW YORK 14, NEW YORK, Room 860, 641 Washington St.; WAtkins 4-1000 Ext. 216 & 217 Night: WA 4-3932.

PHILADELPHIA 6, PA., 601 U. S. Custom House, 2nd and Chestnut Streets; MA 7-6000 Ext. 582.

PORTLAND 3, MAINE, Rm. 18, U. S. Custom Bldg.; SPruce 4-8381.

RICHMOND 19, VA., 1200 East Main St.; MIlton 4-4111. Ext. 2582.

ROCHESTER 23, N. Y., Genesee Valley Regional Market, 900 Jefferson Rd.; HIllside 5-4440.

WINTER HAVEN, FLA., Rm. 216, Florida Citrus Bldg. (Mail—P. O. Box 860); CYpress 3-7670 or CYpress 3-7651.

SAN JUAN, PUERTO RICO, c/o Puerto Rico Dept. of Agriculture & Commerce. (Mail: P. O. Box 10163, Santurce, P. R.); San Juan 3-1012.

Central District

ALBERT LEA, MINN., Room 3, P. O. Bldg.; FRanklin 3-2188.

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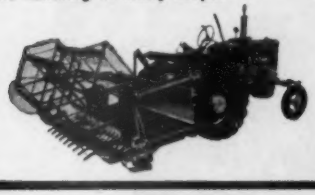
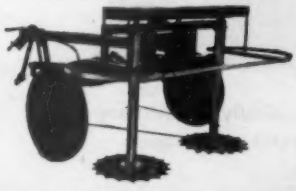


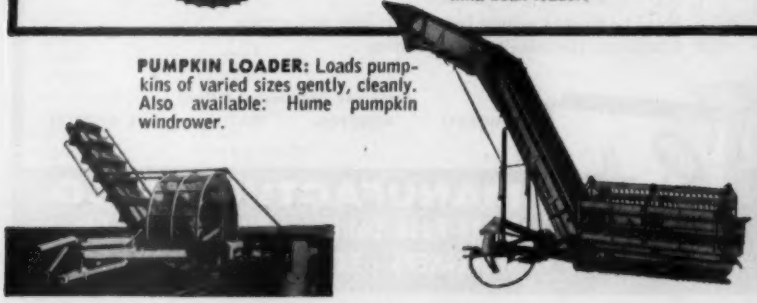
GREEN CROP LOADERS: Fast, dependable loading even under severe crop and weather conditions.

LIMA BEAN CUTTER: Cuts two rows at once, placing in single windrow. Cuts below crown, reducing pod damage. Harvests cleaner, with minimum of roots, dirt.



CUT-LODE HARVESTERS: For once-over harvesting of spinach, greens, green peas — converts to lima bean loader.

PUMPKIN LOADER: Loads pumpkins of varied sizes gently, cleanly. Also available: Hume pumpkin windrower.



PEAS?
PUMPKINS?
SPINACH?
LIMA BEANS?

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COLUMBUS 15, OHIO, 436 Old Federal Bldg.; CApitol 1-6411, Ext. 460.

DETROIT 9, MICH., Rm. 40, Detroit Union Produce Term., 7201 West Fort St.; VInewood 1-1926.

FAYETTEVILLE 5, ARK., 320½ West Dickson St. (Mail—P. O. Box 38, University Station); HIlcrest 2-4021.

HAMMOND, LA., Southeastern College Campus (Mail—P. O. Box 151); Hammond 263.

HUMBOLDT, TENN., Post Office Bldg., 2nd Floor; SUnset 4-1330.

RIPON, WISCONSIN, U. S. Post Office Bldg. (Mail—P. O. Box 96); BLack 540.

WESLACO, TEXAS, 245 South Texas Blvd. (Mail P. O. Box 102); WOodlawn 8-2772.

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DENVER 2, COLO., 324 U. S. Custom House; KEystone 4-4151.

FRESNO 2, CALIF., 3529 E. Tulare St.; AMherst 4-5971.

INDIO, CALIF., Room 103, Johnson Professional Bldg., 82-380 Miles Ave.; DIamond 7-1057.

LOS ANGELES 15, CALIF., Rm. 451 Bendix Bldg., 1206 Maple Ave.; RIchmond 9-9323.

MILTON-FREEWATER, ORE., 111 S. Main St.; WEbster 8-3251.

PORTLAND 5, OREGON, 312 U. S. Court House; CApitol 6-3361, ext. 527.

SALEM, OREGON, 530 Glen Creek Drive, P. O. Box 1145; EMpire 3-3002.

SALT LAKE CITY 14, UTAH, B-45 State Capital Bldg.; DAvis 2-4721, ext. 421.

SAN FRANCISCO 2, CALIF., 506 New Mint Bldg., 133 Herman St.; KLondike 2-2350, ext. 6406.

SAN JOSE 10, CALIF., 670 Stockton Ave.; CYpress 5-7600.

SEATTLE 1, WASH., 1917—1st Ave., Rm. 207, Alaska Trade Bldg.; MUtual 3-300, exts. 1142 and 1143.

STOCKTON 5, CALIF., 2269 E. Miner Ave.; HOward 5-7285.

YAKIMA, WASH., 212 Liberty Bldg.; GLencourt 2-3381.

HONOLULU 1, HAWAII, c/o Board of Commissioners of Agriculture & Forestry. (Mail: P. O. Box 5425, Pawaa Substation); 92071.

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RIETZ DEPENDABILITY

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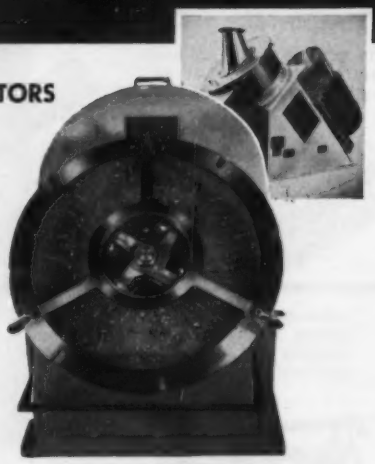
Many of these companies are listed in Rietz Bulletin No. R-507 sent to you on request



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* Applications Include:
- Wet or dry grinding of difficult materials
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* *Depending on screen size and RPM*

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MARKETING AND QUALITY CONTROL: Definition and Standards of Identity

FDA Definitions and Standards

Many of the common forms of processed foods have been standardized by the federal government. This is done through the definitions and standards under the Food, Drug, and Cosmetic Act.

After a standard goes into effect, it becomes the official specification for a food. The product may contain only those ingredients listed. When optional ingredients are shown, they may be used and listed on the label.

Following is a list of processed foods regulated specifically by FDA:

Salad Dressing and Mayonnaise

Product	Section
Dressings for Foods, Part 25	
Mayonnaise	25.1
French Dressing	25.2
Salad Dressing	25.3

Canned Fruits and Fruits Juices

Part 27	
Apricots	27.10
Cherries	27.30
Figs	27.70
Fruit Cocktail	27.40
Peaches	27.0
Pears	27.20
Pineapple	27.50-27.52
Pineapple Juice	27.54
Prunes	27.60

Jellies, Jams, Preserves

Fruit Butters, Fruit Jellies, Fruit Preserves, and Related Products Part 29

Fruit Butter		29.1
Apple	Pear	
Apricot	Plum	
Grape	Prune	
Peach	Quince	
Fruit Jelly		29.2
Apple	Guava	
Apricot	Loganberry	
Blackberry	Orange	
Black Raspberry	Peach	
Cherry	Pineapple	
Crabapple	Plum	
Cranberry	Pomegranate	
Damson plum	Prickly Pear	
Dewberry	Quince	
Fig	Red Raspberry	
Gooseberry	Red Currant	
Grape	Strawberry	
Grapefruit	Youngberry	
Greengage plum		

The big PLUS SERVICE EXPERIENCE RESEARCH PERFORMANCE in Oakite

Mechanized method cleans 100-foot table in 10 minutes

MECHANIZED CLEANING is more profitable cleaning, as this example shows:

Stainless steel skinning tables at a fish packing plant were cleaned daily by a crew armed with brushes and powdered soap. Scrubbing the oily deposits from each hundred-foot table was a tedious, time-consuming job.

Now one man, using an Oakite Hot-Spray Unit and a solution of Oakite Composition No. 20, gets this same table shining bright in just *10 minutes!* What's more, the unit is doing a wonderful job cleaning floors, walls and canning equipment.

The big PLUS in Oakite

Working with Oakite is like adding the services of a consulting sanitation engineer. It brings you the latest information on modern cleaning methods . . . time—and money-saving equipment . . . results of continuing research . . . a vast background of experience . . . materials guaranteed to perform. Ask your local Oakite man for a demonstration. Or, write for Bulletin F-9414. Oakite Products, Inc., 26G Rector Street, New York 6, N. Y.

OAKITE SCIENCE

over 50 Est. 1909 years' leadership in industrial cleaning

Technical Service Representatives in Principal Cities of U. S. and Canada

Extra Quality and Profits for
Pickle and Kraut Packers with

RACO LITE-KOTE KOVERS

RACO Lite-Kote Kovers are made of lightweight tear-resistant neo-nylon material. There are no hems or threads to rot or tear. Oils, greases, alkalis, and most acids will not harm the fabric. Lite-Kote Kovers can be folded when wet without developing mildew. They are free from contaminating odors. All sizes are available. Write for descriptive material and specifications. The same fabric has many industrial uses.

A proven product for outside or inside storage and processing. Just try one and see!

RACO PRODUCTS DIVISION

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Refrigerated Storage to IMPROVE YOUR FRUIT QUALITY and help you get premium prices

To improve your returns from holding apples, pears, peaches and other fruit adopt the Niagara "No-Frost" method of refrigeration.

You will bring your fruit core temperature down faster when you bring in your crop. You will get quicker reduction to uniform temperature and be sure of holding the same high quality at all levels of palleted storage in every corner of your building. You will have the lowest operating and maintenance costs in the business.

Example: 2 Niagara Spray Coolers pre-cool 3500 boxes of pears per 24 hrs. in the 40,000 box storage building shown.

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Dept. C-9 , 405 Lexington Ave., New York 17, N. Y.
District Engineers in Principal Cities

Preserves and Jams		29.3
Apricot	Huckleberry	
Blackberry	Loganberry	
Blackraspberry	Nectarine	
Blueberry	Orange	
Boysenberry	Peach	
Cherry	Pear	
Cranberry	Pineapple	
Crabapple	Plum	
Damson plum	Quince	
Dewberry	Red Raspberry	
Elderberry	Red Currant	
Fig	Rhubarb	
Gooseberry	Strawberry	
Grape	Tangerine	
Grapefruit	Tomato	
Greengage plum	Yellow Tomato	
Guava	Youngberry	

Canned Vegetabes

Parts 51 and 53, Service and Regulatory announcements

Corn, sweet cream style (Whole kernel)	51.20-51.22
Corn, field	51.30
Beans, green snap	51.10
Beans, wax	51.15
Mushrooms	51.503
Peas	51.1
Tomatoes, peeled, cored	53.40
Tomato Juice	53.1
Tomato Juice, yellow	53.5
Tomato Catsup	53.10
Tomato Puree	53.20
Tomato Paste	53.30

Vegetables not specifically regulated but which are identified and aptional ingredients listed under section 51.990

Artichokes	Okra
Asparagus	Onions
Bean Sprouts	Parsnips
Shelled Beans	Black-eye Peas
Lima Beans	Field Peas
Butter Beans	Green Sweet Peppers
Beets	Red Sweet Peppers
Beet Greens	Pimientos
Broccoli	Potatoes
Brussels Sprouts	Sweet Potatoes
Cabbage	Rutabagas
Carrots	Salsify
Cauliflower	Spinach
Celery	Swiss Chard
Collards	Truffles
Dandelion Greens	Turnip Greens
Kale Mushrooms	Turnips
Mustard Greens	

Frozen Fruits and Juices

From Part 27, Canned Fruit and Juices

Lemonade, frozen concentrate	27.101

Paste Products

Alimentary Pastes, Part 16

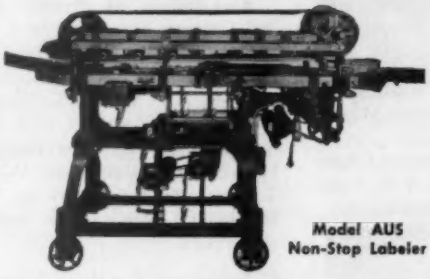
Macaroni Products	16.1
Milk Macaroni	16.2
Whole Wheat Macaroni	16.3
Wheat and Soy Macaroni	16.4
Vegetable Macaroni	16.5
Noodle Products	16.6
Wheat and Soy Noodle Products	16.7
Vegetable Noodles	16.8
Enriched Macaroni	16.9
Enriched Noodles	16.10

Shellfish

Part 36

Shrimp	36.3
Oysters	36.5

Get The Money Saving Facts on BURT LABELERS and PACKERS



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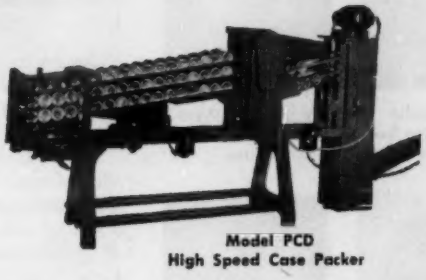
Non-Stop Labeler

For fast . . . easy . . . economical labeling of cans, glass and cartons . . . you can't beat a Burt Non-Stop Labeler. Dual Label feed and auxiliary feed fingers provide continuous action. Label supply is replenished without stopping.



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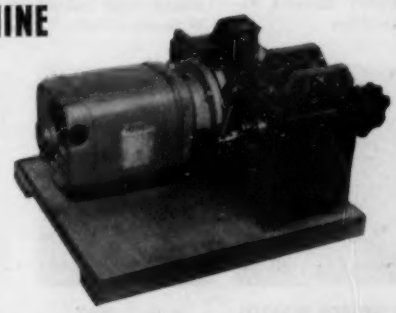

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California Olive Assn., 461 Market St., San Francisco, Calif.

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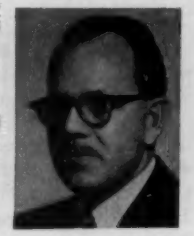

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Frozen Food Council of Southern Calif., c/o Robert Cooper, Terminal Refrigerating Co., 748 Terminal St., Los Angeles 21, Calif.
Pres: Leon Gottlieb.

Frozen Food Distributors Assn. of Calif., Inc., 675 Monadnock Bldg., San Francisco 5, Calif.
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Frozen Pea Council, 333 S. Michigan Ave., Chicago 1, Ill.
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Frozen Potato Products Institute, 333 N. Michigan Ave., Chicago 1, Ill.
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Green Coffee Assn. of New York City, Inc., 101 Front St., New York 5, N. Y.

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Institute of Shortening and Edible Oils, Inc., 1415 19th St., N. W., Washington 6, D. C.

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Louisiana - Mississippi - Alabama Vegetable Processors Assn., c/o J. F. Bowman, Southern Shell Fish Co., Harvey, La.

Maine Canners' and Freezers' Assn., P. O. Box 798, 184 Read St., Portland, Me.

Maine Sardine Council, 15 Grove St., Augusta, Me.

Chmn: James Brown, Sunset Packing Co., W. Pembroke, Me. V-Chmn: Alger Pike, Trident Packing Co., Lubec, Me. Exec-Sec: Richard E. Reed.

Maine Sardine Packers Assn., 15 Grove St., Augusta, Me.

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Mich. Frozen Food Packers Assn. c/o Dorr Dean, P. O. Box 145, Eau Claire, Mich.

Midwst Preservers Assn., c/o Gordon Perry, Holsum Food Products, 120 W. Florida, Milwaukee, Wis.

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Minnesota Canners and Freezers Assn., Association Bldg., 2901 Pleasant Ave., Minneapolis 3, Minn.

National - American Wholesale Grocers' Assn., Inc., 60 Hudson St., New York 13, N. Y.

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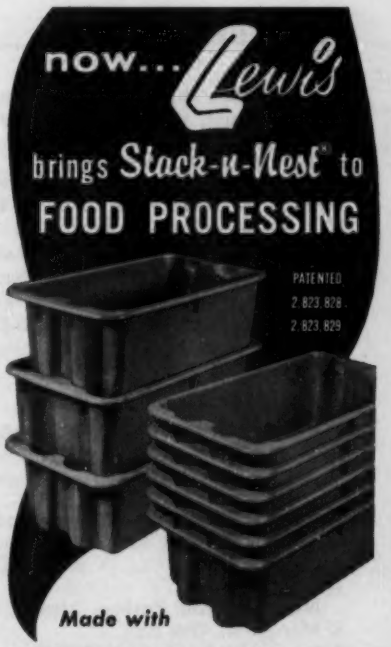

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National Institute of Oilseed Products, 3500-Rincon Annes, San Francisco 19, Calif.

National Kraut Packers Assn., 202 S. Marion St., Oak Park, Ill.

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National Preservers Assn., Room 628, 1346 Connecticut Ave., N. W., Washington 6, D. C.

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National Prune Juice Packers Assn., Inc., 135 Broadway, New York 6, N. Y.

National Red Cherry Institute, 747 Deerfield Rd., Deerfield, Ill.

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National Split Pea Assn., 333 S. Michigan Ave., Chicago, Ill.

New Jersey Asparagus Industry Council, Box 366, Millville, N. J.

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Northwest Canners and Freezers Assn., 505 Corbett Bldg., Portland 4, Ore.

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Northwest Cherry Briners Assn., 302 N. 29th St., Corvallis, Ore.

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Northwest Packers and Growers, Inc., The Executive Bldg., 811 S. W. Sixth Ave., Portland 4, Ore.

Pres: Alvin H. Randall, United Growers, Inc., Salem, Ore. V-P: Stuart R. Kerr, Kerr Conserving Co., Portland, Ore. Sec-Treas: William E. Yeomans.

Northwest Salmon Canners Assn., 309 Colman Bldg., Seattle 4, Wash.

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Ontario Food Processors Assn., Inc., 309 Food Terminal Bldg., Queensway, Toronto 14, Ontario.

Ozark Canners, Processors, Brokers & Supplymen Assn., P. O. Box 962, Commercial Station, Springfield, Mo.

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Pacific Coast Oyster Growers Assn., Room 4, Ferry Dock, Seattle 4, Wash.

Pres: Earl R. Brenner, J. J. Brenner

Oyster Co., Shelton, Wash. V-P: Stanley R. Gilles, Stony Point Oyster Co., South Bend, Wash. Sec-Treas: Charles R. Pollock.

Pan-American Coffee Bureau, 120 Wall St., New York 5, N. Y.

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Pres: George W. Mechling, J. F. Garvey Co., Lincoln, Neb. 1st V-P: Charles Rolleston, Gordon Foods, Atlanta, Ga. 2nd V-P: John C. Ritchie, All American Nut Co., Downey, Calif. Mng Dir & Gen Counsel: James E. Mack.

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Popcorn Institute, 333 S. Michigan Ave., Chicago, Ill.

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Pres: John A. Hauser, C. H. Musselman Co., Biglerville, Pa. V-P: L. W. Brown, National Fruit Product Co., Inc., Winchester, Va. V-P: M. E. Knouse, Knouse Foods, Inc., Peach Glen, Pa. V-P: H. E. Meinhold, Duffy-Mott Co., Inc., New York, N. Y. V-P: W. A. Overstreet, Sebastopol Cooperative Cannery, Sebastopol, Calif. Sec: C. A. Ray, New Era Canning Co., New Era, Mich. Treas: J. Pinckney Arthur, Shenandoah Valley Apple Cider and Vinegar Corp., Winchester, Pa.

Purple Plum Association, 522 Pittock Block, Portland, Ore.

Pres: L. D. Jones, Washington Canners, Vancouver, Wash. 1st V-P: A. H. Randall, Western Oregon Packing Co., Salem, Ore. 2nd V-P: Chester Roche, United Growers, Inc., Corvallis, Ore. Sec-Treas: Don Dawson.

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Santa Clara County Canners Assn., Room 800, 215 Market St., San Francisco 5, Calif.

Pres: B. E. Richmond, Richmond-Chase Canning Co., San Jose, Calif. V-P: Robert Quirk, Hawaiian Pineapple Co., Ltd., San Jose, Calif. Sec-Treas: Robert J. Marsh, Canners League of California, San Francisco, Calif.

Southern Calif. Food Processors Assn., Room 1115, 649 South Olive St., Los Angeles 14, Calif.

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Southern Frozen Food Assn., 807 Fulton Federal Bldg., Atlanta, Ga.

Pres: Roscoe Loewe, Loewe Frozen Foods Co., Pensacola, Fla. V-P: Lee Swepston, W. I. Anderson Co., Greensboro, N. C. Treas: C. Gordon Giffith, Plantation Food Corp., Miami, Fla. Chmn of the Bd: Jack C. Corbett, Jacksonville Frosted Foods, Jacksonville, Fla.

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Sugar Association, Inc., 52 Wall St., New York 5, N. Y.

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Super Market Institute, Inc., 500 N. Dearborn St., Chicago 10, Ill.

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Pres & Gen. Counsel: Robert H. Shields.

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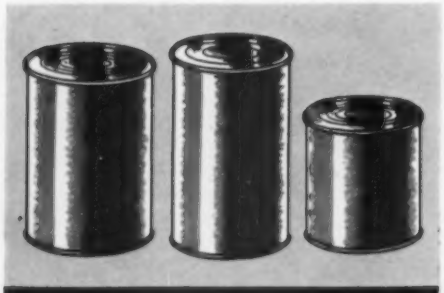

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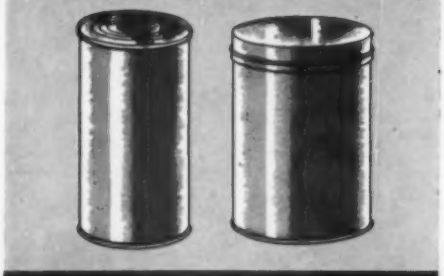

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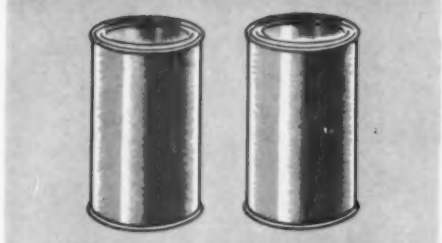

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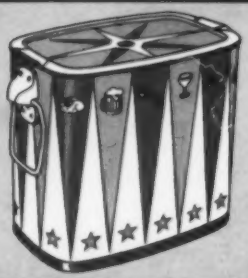

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